

# Air Conditioning & Refrigeration News

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## IN THIS ISSUE

### The Rockne System For Salesmen

Knute Rockne was a great teacher of football, but more than that he was a genius in handling men. A dealer in Pasadena, Calif. saw no reason why Rockne's handling of football players shouldn't apply to salesmen. How the dealer used "Rock's" methods is told on page 4.

### When the Lightning Struck France

Most of us have probably—recent months—thought about what might happen to our lives, to our businesses, if some foreign power should invade our shores. An American who was in the refrigeration business in France tells what happened to him and to his business in the Battle of France, and the subsequent events. For a vividly told story, see page 6.

### About Evaporative Condensers

What are the facts about the advantages of an evaporative condenser for refrigerating systems? How can these be demonstrated to a customer? What are the maintenance problems on evaporative condensers? See "question of the week," page 10.

### Tricks In Transferring

Parts jobbers and others interested in refrigerant transfer will learn a new trick if they read the story on page 11.

### Ready To Make Ice Cream?

When you've finished the article on page 15, you'll know how to make ice cream in a counter freezer. (That is, if you've read the other instalments.)

### Where Locker Plant Profits Lie

Whence comes the profit from a refrigerated locker plant? One authority thinks it is mostly from the processing charges, and tells why on page 13.

### Prospects 'on the Spot'

Salesmen are often "on the spot," but the Popkys of Wilkes-Barre, Pa. specialize in putting prospects "on the spot." They've got a bag of tricks, some of which are revealed on page 9.

## SALES UP!

York Orders Up 10%

YORK, Pa.—Orders booked by York Ice Machinery Corp. during the nine months ended June 30, totaled \$12,560,931, as compared with \$11,396,429 in the corresponding period of 1939. President S. E. Lauer reported in a letter to stockholders Aug. 13.

Sales completed during the same period totaled \$8,589,596, against \$7,876,752 for the same period of 1939. While reporting these increases, which amount to about 10% and 9%, respectively, over last year, Mr. Lauer also reported a decrease of 7.5% in general administrative and selling expenses.

At the end of the third quarter, the company shows an operating improvement of \$786,000 as compared with last year.

### Virginia July Sales Gain

ALEXANDRIA, Va.—Major appliance sales by dealers in the territory of Virginia Public Service Co. continued to soar well above 1939 marks during the month of July. Sales for the first seven months of the year also were considerably higher than those for the same period of 1939.

July refrigerator sales this year totaled 1,712, compared with 1,120 for July, 1939; electric range sales ran 132, against 117; and water heater sales were 76, compared to 44.

## 'Letter to the Editor' From Angry Traveler Spotlights 'No Cooling' Agreement of Atlanta Hotelmen

ATLANTA — An attack on a "gentlemen's agreement" among Atlanta hotel men not to extend air conditioning to guest rooms, by Julien S. Friede, a traveler from Springfield, Mass., has provoked new discussions of air conditioning by the Atlanta Hotel Men's Association.

In a recent letter to the Atlanta Journal, Mr. Friede complained not only against the lack of air conditioned guest rooms here, but also against what he described as the "dictators of hotels," who, he charged, are holding up this progressive step for the comfort of their guests.

Mr. Friede intimated that numerous travelers would shun Atlanta in the summer time unless something is done about air conditioning hotels.

In reply to these charges, the hotel

men here say their agreement is more of a "mutual assistance pact" against high-pressure salesmanship, and is not aimed at the traveling public. They also assert there is a move on foot for at least partial air conditioning of guest rooms—say one floor of guest rooms at each major hotel.

The city's major hotels have had air conditioned dining rooms, meeting halls, and public assembly places for several years, but the recent complaint by Mr. Friede during a period of "unprecedented" hot weather has turned the minds of Atlanta hotel men to man-made weather.

A recent survey by the Atlanta Journal shows there is only one hotel in the city with air conditioned

(Concluded on Page 16, Column 2)

## Dept. Store Refrigerator Sales Trend Was Down In 1938-1939

### No 'Dog Days' Necessary Even At the Dog Show!

DETROIT — Air conditioning is responsible for the unusual amount of publicity being given a dog show sponsored by the Chrysler Kennel club here. One local daily headlines the event, in a Sunday feature story, "Air Conditioned Dog Show Is Slated For Detroit Aug. 31."

Members of the canine aristocracy will display their finest points in the air-cooled Chrysler Service building, unhampered by the heat and humidity common to Detroit at this season of the year.

### Survey Just Revealed Shows Trend By Year, Season & Size of Store

NEW YORK CITY—Volume of mechanical refrigeration business done by department stores during 1939 was 14% lower than in 1935, it is revealed in a study of yearly sales trends made by the Controllers Congress of National Retail Dry Goods Association in connection with a report on the "Seasonal Distribution of Department and Specialty Store Sales," just completed.

The study covers member stores with annual sales of \$500,000 or more in all departments, and includes 87 departments, showing, in addition to yearly trends, the average monthly distribution of sales for 1939, both for the 12 Federal Reserve Districts and the U. S. as a whole, percentage of departmental to total store sales, and sales per square foot of space for each department.

Compared with 1935 figures, on which the last study of the seasonal trend of sales in the department store field was based, the report shows that refrigeration volume, after recording notable gains during 1936 and 1937, dipped about 30% in 1938 and made a minor recovery last year.

Using the 1935 dollar volume as a base of 100, index value of sales during the past four years, figured on a "tradewide" basis, were as follows:

1936	116
1937	121
1938	84
1939	86

Total sales of household electric refrigerators in the United States for those years, were as follows:

1935	1,568,000
1936	1,996,000
1937	2,310,000
1938	1,254,000
1939	1,900,000

Two-fifths of the department stores' refrigeration business for last year was done in the second quarter of the year, the study revealed. The months of April, May, and June accounted for 42.2% of all sales, with

(Concluded on Page 2, Column 1)

## 'Looking Glass' Trick Is Range Drive Aid

NEW YORK CITY—"It's done with mirrors."

The old saying will be appropriate in relation to the Modern Kitchen Bureau's fall electric range program, more details of which have just been released. First announcement of the fall campaign was made in the July 3 issue of AIR CONDITIONING & REFRIGERATION NEWS.

"Alice In Electric Wonderland" is the promotional theme of the campaign, and a principal feature is a "magic mirror" window display, carrying out the "Through the Looking Glass" idea.

When the light in the display is off, the glass is a mirror inviting passersby to stop and primp. When the light flashes on, the prospect looks through the mirror and sees a colorful picture of Alice exclaiming over the marvels of modern electric cookery.

The "magic mirror" central display unit is supported by a series of four counter cards reproduced in full color from actual color photographs, and a series of five range cards to be set in and on the electric range itself, calling the prospect's attention to five major sales points.

Other big feature of the bureau's fall range plans is a dramatized hour-and-a-half demonstration of the advantages in electric cooking—a different kind of a cooking school.

(Concluded on Page 2, Column 4)

## Trade-Ins Spell 'Profit' Not 'Problem' To Dealers In Portland, Oregon

Schedules By Central Appraisal Bureau Are the Answer

PORTLAND, Ore. — Tailoring trade-in allowances on mechanical refrigerators and other appliances to local conditions, through the medium of the Central Appraisal Bureau, has enabled Portland dealers to transform a "white elephant" into a paying proposition within the space of four years.

The bureau was organized in 1935, and issued its first tentative schedule of appraisals, covering electric, gas, wood, and coal ranges, and refrigerators, in January, 1936. At its inception, the bureau had a membership of 15 appliance dealerships; at present, 39 Portland firms are affiliated with the organization. J. King Byron is secretary.

The bureau does not enter into any transaction, beyond the prescribing of trade-in values. It never makes direct appraisals, and does not help in the disposal of any of the used ranges or refrigerators involved in new-equipment sales, Mr. Byron says.

To help dealers check up on stories told by customers regarding trade-in offers, the names and addresses of all dealers in the organization are printed on the front of the allowance schedule. According to Mr. Byron, the greatest value of this is its psychological effect in

helping to break down this type of customer "propaganda."

"Many customers handle the truth very lightly," says Mr. Byron, "and showing the names of the dealers they claim offered them a higher valuation usually has the effect of stopping their 'shopping tour' immediately, or at least proving to the customer that the fabrication is recognized."

Present schedule of appraisals is revised as of March 1, 1940. Greater

(Concluded on Page 16, Column 1)

## N. Y. Edison Will Give Washers a Push

NEW YORK CITY—An intensive two-month campaign designed to sell the idea of the modern home laundry as well as the actual equipment with which to outfit it is planned by Consolidated Edison Co. for Sept. 1.

Participating in this drive—and indicative of the breadth of its scope—will be 13 washer manufacturers, nine ironer firms, eight

(Concluded on Page 16, Column 4)

## Ammunition For the Greatest Fall Range Drive



This display shows some of the sales helps which the Modern Kitchen Bureau is providing for the greatest fall range drive ever to be attempted. On the stand at the right is the "magic mirror" which is sometimes a picture (as shown here) and sometimes just a plain mirror. On the floor are a series of four counter cards reproduced from actual color photographs, while on the range are the series of five range cards designed to be set in and on the range itself in window and floor displays. Girl symbolizes the dramatic sketch presentation of the electric range's advantages which will be presented in various parts of the country.

## Barlow & Seelig Plan Guarantees Annual Wage To Employees

RIPON, Wis. — Ratification by National Labor Relations Board of an agreement guaranteeing an annual wage to employees of Barlow & Seelig Co., manufacturer of "Speed Queen" laundry equipment, has been announced by H. A. Bumby, president of the company.

Barlow & Seelig is the first appliance manufacturer in the country to guarantee an annual wage to its employees, it is believed. At the present time, it is reported, there are less than a dozen major manufacturers in the United States who guarantee an annual wage to workers.

The annual wage agreement, signed by company officials and representatives of S.W.O.C. Local No. 1327, was made retroactive to May 1, 1940.

Under terms of the agreement, each "class A" employee is guaranteed a minimum of approximately 1,800 hours of work per year, at an annual wage. "Class B" employees are guaranteed a minimum annual employment of approximately 1,600 hours. Designation of employee classes is based on seniority.

While the agreement with "class A" employees has been in effect the past 60 days, that with "class B" workers went into effect on Aug. 12.

(Concluded on Page 2, Column 5)

## Refrigerator Sales Trend In Big Stores Revealed In Survey

(Concluded from Page 1, Column 5)

May the leader, with 15.2%, June second, with 14%, and April third, with 13%.

July and March were other above-average sales months last year, the report shows, with 10.9% and 10.8% of the year's total volume being transacted in those months.

Apparently refrigerators haven't caught customer fancy as gift items, despite considerable advertising around the holiday season. November refrigerator volume was only 3.7% of that for the year, and December was only slightly better, with 4.3%. In some individual stores, refrigerator departments were more active, but not more than 10% of the stores included in the study obtained an average month's volume in this month. This also was true of December.

The refrigeration department accounts for a small proportion of total store sales, the study indicated. Average contribution of this department to total store volume, for all stores included in the study, was 1.1%. In smaller stores, however, a considerably larger percentage of total volume was credited to the department—2.6% in those stores doing between \$500,000 and \$1,000,000 total business annually.

Best sales months for other major household appliances, the study re-

vealed, were September, October, and December, in that order. Interesting fact brought out by the report was that the peaks and dull periods of this department contrast sharply with the corresponding periods of the refrigeration department.

Other appliances produced 1.2% of total store volume, on the average, last year, a mark slightly higher than refrigeration. Also, sales were slightly in excess of 1935 volume, the index value being 103, in contrast with refrigeration, which, as noted above, showed an index of 86, or 14% under 1935 figures.

Despite their comparatively weak showing in terms of total store volume, refrigeration sales per square foot of departmental floor space were higher than those for either other major appliances or radios, phonographs, and records, the average being \$45 for refrigerators, \$37 for other appliances, and \$35 for

radios.

How refrigeration sales peaks vary during the year in various sections of the country is indicated in the tables of the report breaking down monthly volume by Federal Reserve Districts.

In the Minneapolis district, for example, 20.8% of the year's sales were made during April, with other above-average months ranging between 10 and 13%. In the St. Louis district, June brought 18% of the year's sales, with March and May following in that order.

May was high month in the New York City, Philadelphia, Cleveland, Chicago, Kansas City, and Dallas districts; June led the year's volume in the Boston, Richmond, Atlanta, and St. Louis areas; April, as noted, paced Minneapolis district business for the year; and April and July brought identical percentages of volume in the San Francisco area.

TREND OF YEARLY DEPARTMENT STORE SALES OF  
REFRIGERATORS AND MAJOR APPLIANCES  
1935 = 100

Total Store Volume	Product	1936	1937	1938	1939
½ to 1 Million	Refrigeration	128	124	77	85
	Appliances	119	118	94	86
1 to 2 Millions	Refrigeration	122	137	96	85
	Appliances	104	99	79	87
2 to 5 Millions	Refrigeration	125	135	97	108
	Appliances	116	114	91	108
5 to 10 Millions	Refrigeration	103	100	76	74
	Appliances	118	124	109	129
Over 10 Millions	Refrigeration	110	118	82	90
	Appliances	118	122	91	106
All Stores	Refrigeration	116	121	84	86
	Appliances	114	113	90	103

## Mapping 'Plays' For Norge Sales Forces



Somewhat reminiscent of a football huddle in this group of Norge sales executives, as they go over plans for the final roundup of sectional distributor meetings now underway. Probably they are also charting plans for next year. Left to right, seated, are: E. J. Kanker, range sales manager; Paul Puffer, sales manager; M. G. O'Harra, vice president in charge of sales. Standing: Earl Bridge, manager, washer and space heater sales; J. M. Tenney, assistant sales manager.

## Details Announced For Fall Range Promotion

(Concluded from Page 1, Column 2)

This has been designed for presentation by electric leagues, local bureaus, and utilities.

The pattern for this demonstration is something as follows: The master of ceremonies makes a curtain speech dedicating the show to the American housewife.

The play starts out by showing the trials and tribulations which Alice's mother has to endure because she doesn't have electric cooking. In the next scene Alice appears, and tells her mother that the White Rabbit has the solution to her problems, and will take them on a trip through Electric Wonderland so they can see how easy and fine is the American way of living.

With this the curtains open onto the main part of the stage showing the ranges and other materials set up for the demonstrations. Settings and script are drawn from the original "Alice in Wonderland" story, but the big point is that the show is a glorified cooking school—not with any trick methods, but a dramatized presentation of the advantages of electric cooking.

## Kelvinator Low Bidder on New Orleans Project

NEW ORLEANS—Nash-Kelvinator Corp. was apparent low bidder on 4,917 electric refrigerators of two sizes for installation in six housing projects under way here by the Housing Authority of New Orleans.

The Nash-Kelvinator bid was \$276,801. Frigidaire was next low with \$283,246.83, and Monroe Hardware Co., Westinghouse outlet in New Orleans, was third with \$296,760.

Other bids received were: Interstate Electric Co., New Orleans Crosley distributor, \$308,555.13; General Electric Co., \$331,217.42; Norge Products Co., New Orleans distributor, \$334,797.18.

## Barlow & Seelig Signs Annual Wage Plan

(Concluded from Page 1, Column 5)

The agreement also includes a week's vacation for all plant employees.

"We expect this annual wage plan to prove beneficial to both the company and the employees," Mr. Bumby said. "It enables the company to level out production, gives the men longer hours of employment during our peak seasons, and assuring us of a crew of experienced men at all times. The men are assured of an annual income, and are able to budget their expenditures accordingly."

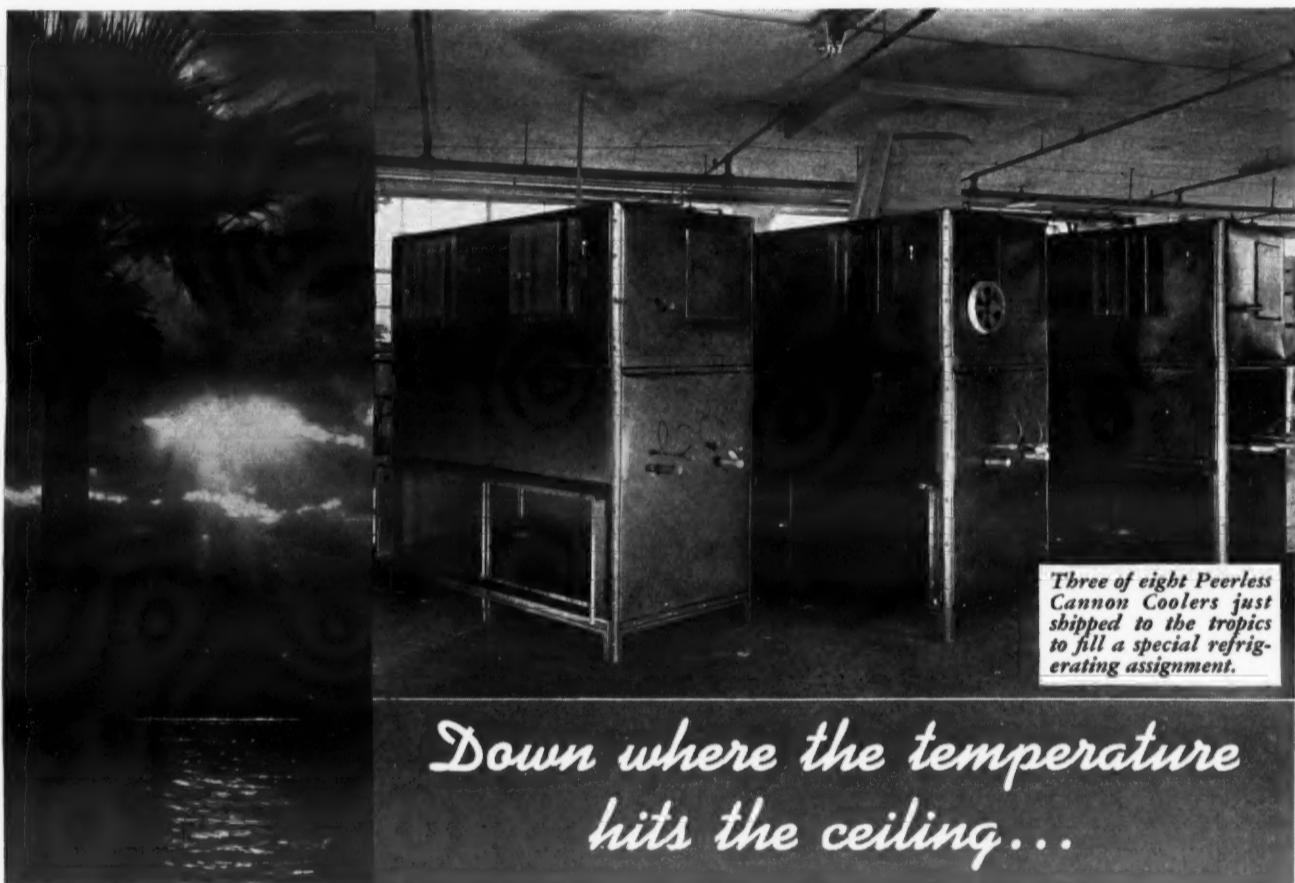
## Atlanta Dealer Group Makes Significant Changes In By-Laws

ATLANTA—Board of directors of Atlanta Electrical Association recommended at a recent meeting that the phrase "to standardize selling practices" be stricken from Article 2 of the association's by-laws, which explains the purpose of the organization.

The directors reported that some members have expressed the fear that the questioned phrase, intended to refer solely to the maintenance of ethical selling practices, might be erroneously construed to refer to price fixing, a violation of Federal law.

With this recommended revision, Article 2 would read as follows: "Purpose—The purpose of this Association shall be to further the interests of retailers, distributors, and manufacturers' representatives of any one or more of the following lines: radio sets and accessories; electrical refrigerators, and other electrical appliances; to improve methods of selling; and to survey and disapprove misleading advertising."

Association members will ballot by mail on this change.



*Down where the temperature  
hits the ceiling...*

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These are a few of the reasons why you never saw a more effective cooler for storage and sharp freeze rooms, for packing houses, locker plants, dairies, or for any application you can name. Standard capacities up to 10 tons—larger on special order.

For engineering data, call your jobber or write the nearest Peerless Factory



Save on water costs with new Peerless BWS Water Saver. Seam-welded for water-tightness. Full cone sprays. New shallow-type Thermek condenser. 7½ to 50 ton capacities. All available at amazingly low cost.

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### REPLACEMENT DOOR GASKETS

**"Fit Like the Paper on the Wall"**

● That's because each Miller Replacement Gasket is made from the same die which produced the original gasket for the refrigerator manufacturer. There's no variance in quality, either. Here again the "original" formula for age and grease-resisting compounds is employed to give you the finest rubber door gaskets money can buy.

The Miller line is complete, offering 28 gasket types with which you can service 80% of all refrigerators regardless of make. If you want to put door gasket replacements on a profitable, business-like basis, write for free sample card and name of nearest Miller jobber.

**MILLER RUBBER CO., INC. • AKRON, OHIO**  
**"Engineers in Rubber"**

## Chicago Room Cooler Sales Boomed In July

CHICAGO—Thirty-seven central-plant air conditioning systems and 337 room coolers were sold by distributors and dealers in the Chicago area during July, according to reports compiled by Commonwealth Edison Co.

Combined capacity of central-plant installations during the month was 415 hp., as compared with 33 installations, totaling 375 hp., reported in the same month of last year.

Room cooler sales in July included 312 separate installations, and covered 169 residences, 50 doctors' and dentists' offices, and 89 offices.

For the first seven months of the year, central-plant installations amounted to 1,063, with a combined capacity of 7,483 hp., as compared with 975 installations, totaling 4,240 hp., for the corresponding period of 1939. Record for the month:

Restaurants	7
General Offices	7
Funeral Parlors	4
Industrial Plants	4
Private Offices	3
Candy Stores	3
Clothing Stores	2
Studios	2
Amusement Parlor	1
Residence	1
Drug Store	1
Food Store	1
Shoe Store	1
<b>Total</b>	<b>37</b>

## 'Help Wanted' Method of Getting Distribution Is Subject of FTC Action

WASHINGTON, D. C.—Charles D. Brown, trading as Michigan Merchandising Co., Pontiac, Mich., is charged with the dissemination of misleading representations in the sale of a small electric water heater, known as the "Wonder Electric Water Heater," in a complaint issued by Federal Trade Commission.

The complaint charges that the business as conducted by the respondent is a scheme to extract money from persons in need of employment by misrepresenting to them, through "help wanted" sections of newspapers, the character of work to be performed, the purpose of an initial payment of \$100 by the applicant for work, the terms of employment, the salary to be paid, the price for which the heater is regularly sold, and the extent and nature of the guaranty on the heaters.

Alleged misrepresentations include: That prospective distributors answering the "help wanted" ads are only to make deliveries of and collections for the heaters;

That respondent will establish the required number of dealers to handle the heaters on a consignment basis, without any sales effort on the part of the distributor;

That the initial payment of \$100 required of each distributor is in the nature of a temporary bond, and will be refunded as soon as the routine matter of securing and approving the list of dealers has been accomplished;

That the respondent will pay to the distributor a weekly salary of \$25, commencing on the day the contract is signed, plus a commission of 50 cents per heater for every heater over two sold each week by each established dealer in the distributor's territory.

In truth, the complaint charges, no salary or commission has ever been paid to any distributor; no quota of dealers has ever been established which met the number necessary to entitle the distributor to a refund, salary, or commission; the initial payment of \$100 was not in the nature of a temporary bond, but is applied as payment for 48 of the electric water heaters, and the distributor, under the plan, becomes a mere purchaser of the heaters, without any adequate outlets for their disposal or established dealers to handle them.

### Dallas Drive-In Cafe Asks Bids on Cooling

DALLAS, Tex.—Bids have been called for the installation of air conditioning equipment in a drive-in cafe to be built at Forest and Lamar Sts., Dallas, for Pete Nanovich.

## Georgia's Governor No Longer In 'Hot Spot'

ATLANTA—Politically Gov. Rivers of Georgia may be on the "hot spot" before the summer is over, but he won't be there physically—not since a portable air conditioner was installed in his private office in the state capitol here several weeks ago.

Incidentally, this is said to be the first installation of cooling in Georgia's governmental headquarters.

### Farmville, Va. Dealer Opens New Store

FARMVILLE, Va.—Southside Electric Supply Co., Hotpoint dealer here, recently held a formal opening of its new store. This company handles practically everything in the electrical line.

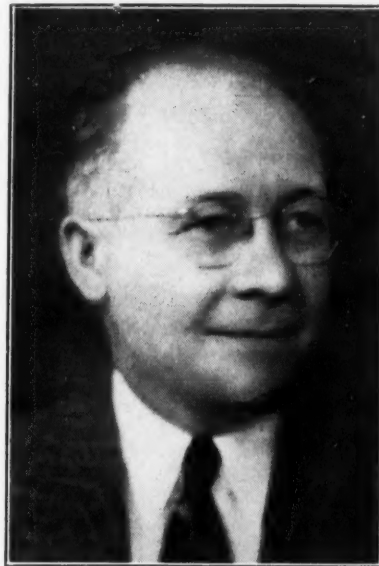
## Connecticut Court Upholds Price Law

HARTFORD, Conn.—Provisions of the Connecticut unfair sales practices act, prohibiting below cost sales of merchandise when such sales are intended to injure or destroy competition, were upheld as constitutional Aug. 7 by the State Supreme Court of Errors.

"It is possible, unless restrained by law, for a powerful merchandiser with large resources to continue to sell at a loss in a community and thereby drive weaker competitors out of the market, establish a monopoly, and mulct the public," the court's opinion stated. "It is not the concern of the courts to pass upon the economic advantages or disadvantages of particular acts of legislation. Such matters are for the legislature to determine."

The decision was in the case brought by Ralph J. Carroll, operator of a grocery store in Stamford.

## President



F. F. HICKEY  
New head of Savage Arms, which manufactures refrigeration products as well as guns.

## Defense Tax Misuse May Be Probed

WASHINGTON, D. C.—Following reports to the Bureau of Internal Revenue of excessive tax charges by retailers in connection with the new defense tax, particularly in the field of radio sales, Congress has been asked to investigate profiteering under the guise of financing the defense program.

The investigation was recommended in a bill submitted by Rep. Joseph A. McDermott, of Pennsylvania. It proposes that a special committee of five members of the House be appointed to make a study of the extent of profiteering in the new tax, and investigate means of preventing it. Particular attention would be paid to ways and means of curbing the practice by "manufacturer, jobber, wholesaler, or retailer."

The inquiry would also be broadened to include the extent of profiteering through price increases.

**Engineered...**  
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**PAR** Refrigeration Equipment has been engineered, designed and built as a complete unit to give you *peak performance, maximum economy and extra years of faithful service.* From the ground up—each bolt and nut, each streamlined fitting, the simplified compressor, the over-all design of the complete assembly—have been engineered as one

composite unit... not just a collection of individual sub-assemblies bolted together.

On the record of hundreds of Par Refrigeration Units in daily operation nation-wide, you can expect this experienced *engineering* to give you economical performance and long life free of trouble.

### ★ ★ A PAR UNIT FOR EVERY JOB ★ ★ SEE YOUR JOBBER

<b>ALABAMA</b> BIRMINGHAM—REFRIGERATION SUPPLIES DISTRIBUTOR MONTGOMERY—TEAGUE HARDWARE CO. <b>ARIZONA</b> PHOENIX—J. CARL WHITE CO. <b>CALIFORNIA</b> FRESNO—ARBELE REFRIGERATION SUPPLIES LONG BEACH—REFRIGERATION SUPPLIES DISTRIBUTORS LOS ANGELES—FRANK GILLET COMPANY LOS ANGELES—REFRIGERATION SUPPLIES DISTRIBUTORS OAKLAND—CALIFORNIA REFRIGERATOR CO. SAN DIEGO—REFRIGERATION SUPPLIES DISTRIBUTORS SAN FRANCISCO—CALIFORNIA REFRIGERATOR COMPANY <b>COLORADO</b> DENVER—MC COMBS REFRIGERATION SUPPLY CO. <b>DISTRICT OF COLUMBIA</b> WASHINGTON—MELCHIOR, ARMSTRONG, DESSAU COMPANY <b>FLORIDA</b> JACKSONVILLE—BOWEN REFRIGERATION SUPPLIES, INC. TAMPA—BOWEN REFRIGERATION SUPPLIES, INC. WEST PALM BEACH—MOTOR PARTS & EQUIPMENT COMPANY, INC. <b>GEORGIA</b> ATLANTA—BOWEN REFRIGERATION SUPPLIES, INC. MACON—LOWE ELECTRIC CO.	<b>ILLINOIS</b> CHICAGO—H. W. BLYTHE COMPANY CHICAGO—AUTOMATIC HEATING & COOLING SUPPLY COMPANY <b>INDIANA</b> INDIANAPOLIS—F. H. LANGSENKAMP CO. SOUTH BEND—F. H. LANGSENKAMP CO. <b>IOWA</b> CEDAR RAPIDS—DENNIS REFRIGERATION SUPPLY DAVENPORT—REPUBLIC ELECTRIC COMPANY DES MOINES—DENNIS REFRIGERATION SUPPLY SIoux CITY—DENNIS REFRIGERATION SUPPLY WATERLOO—WINTERBOTTOM SUPPLY CO. <b>KANSAS</b> WICHITA—HOWARD SUPPLY COMPANY <b>KENTUCKY</b> LEXINGTON—UNITED SERVICE CO., INC. LOUISVILLE—S. W. H. SUPPLY CO., INC. <b>MARYLAND</b> BALTIMORE—MELCHIOR, ARMSTRONG, DESSAU COMPANY <b>MASSACHUSETTS</b> BOSTON—MELCHIOR, ARMSTRONG, DESSAU CO. SPRINGFIELD—MELCHIOR, ARMSTRONG, DESSAU COMPANY <b>MICHIGAN</b> FLINT—LIFSEY DISTRIBUTING COMPANY GRAND RAPIDS—B. F. HARRIS & SON <b>MINNESOTA</b> MINNEAPOLIS—REFRIGERATION & INDUSTRIAL SUPPLY CO., INC. <b>MISSOURI</b> KANSAS CITY—FORSUMD PUMP & MACHINERY COMPANY ST. LOUIS—BRASS & COPPER SALES COMPANY <b>NEBRASKA</b> LINCOLN—WICKHAM SUPPLY COMPANY OMAHA—INTERSTATE MACHINERY & SUPPLY CO.	<b>NEW JERSEY</b> NEWARK—MELCHIOR, ARMSTRONG, DESSAU CO. RIDGEFIELD—MELCHIOR, ARMSTRONG, DESSAU COMPANY <b>NEW YORK</b> ALBANY—MELCHIOR, ARMSTRONG, DESSAU COMPANY BROOKLYN—MELCHIOR, ARMSTRONG, DESSAU COMPANY BRONX—MELCHIOR, ARMSTRONG, DESSAU CO. BUFFALO—MELCHIOR, ARMSTRONG, DESSAU CO. ROCHESTER—MELCHIOR, ARMSTRONG, DESSAU COMPANY NEW YORK CITY—MELCHIOR, ARMSTRONG, DESSAU COMPANY <b>NORTH CAROLINA</b> CHARLOTTE—HENRY V. DICK & COMPANY GREENSBORO—HASCO, INC. RALEIGH—HENRY V. DICK & CO. <b>OHIO</b> AKRON—PERCY G. HANSEN CINCINNATI—THE MERKEL BROTHERS CO. CLEVELAND—DEBES & COMPANY COLUMBUS—REFRIGERATION ELECTRIC SUPPLY COMPANY DAYTON—THE W. H. KIEFABER COMPANY HAMILTON—W. H. KIEFABER CO. TOLEDO—HEAT & POWER ENGINEERING CO. OKLAHOMA CITY—MIDKEE SUPPLY COMPANY TULSA—MACHINE TOOL & SUPPLY CO. <b>OREGON</b> PORTLAND—REFRIGERATION SUPPLY, INC. <b>PENNSYLVANIA</b> HARRISBURG—MELCHIOR, ARMSTRONG, DESSAU COMPANY PHILADELPHIA—MELCHIOR, ARMSTRONG, DESSAU COMPANY PITTSBURGH—MELCHIOR, ARMSTRONG, DESSAU COMPANY <b>EXPORT DEPARTMENT</b> MELCHIOR, ARMSTRONG, DESSAU COMPANY, RIDGEFIELD, N. J.	<b>SOUTH CAROLINA</b> COLUMBIA—HENRY V. DICK & CO. <b>TENNESSEE</b> CHATTANOOGA—PEGLAN MACHINERY CO. KNOXVILLE—HENRY V. DICK & CO. MEMPHIS—UNITED REFRIGERATOR SUPPLY CO. NASHVILLE—ELECTRA DISTRIBUTING COMPANY <b>TEXAS</b> CORPUS CHRISTI—HOLSWORTH EQUIPMENT CO. DALLAS—THE ELECTROMOTIVE CORPORATION FORT WORTH—MC KINLEY REFRIGERATION SUPPLY COMPANY, INC. HOUSTON—D. C. LINGO COMPANY LUBBOCK—R. R. PARTS AND SUPPLIES COMPANY WICHITA FALLS—UNITED ELECTRIC SERVICE CO. <b>VIRGINIA</b> NORFOLK—NOLAND COMPANY, INC. RICHMOND—A. R. TILLER, INC. <b>WASHINGTON</b> SEATTLE—REFRIGERATIVE SUPPLY, INC. SPOKANE—REFRIGERATION PARTS SUPPLY CO. <b>WEST VIRGINIA</b> CHARLESTON—AIR CONDITIONING & REFRIGERATION SUPPLIES, INC. <b>WISCONSIN</b> APPLETON—REFRIGERATION SPECIALTY CO. MILWAUKEE—REFRIGERATION SPECIALTY CO. <b>CANADA</b> MONTREAL, QUEBEC—RAILWAY & ENGINEERING SPECIALTIES, LTD. TORONTO, ONTARIO—RAILWAY & ENGINEERING SPECIALTIES, LTD. WINNIPEG, MANITOBA—RAILWAY & ENGINEERING SPECIALTIES, LTD. VANCOUVER, BRITISH COLUMBIA—FLECK BROS., LTD.
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Catalog of Complete Line Sent on Request

MODERN EQUIPMENT CORPORATION

DEFIANCE, OHIO

## Knute Rockne's Football Formula Works Well For Appliance Dealer

PASADENA, Calif.—The old Knute Rockne formula of teaching men to think for themselves—of giving them a job to do and then letting them go at it in their own way—has worked out just as well for Harold W. Taylor, head of L. C. Taylor Co. here, in appliance merchandising as it did for "Rock" in football.

"Too much supervision," declares Mr. Taylor, "will never build a strong organization. A specialty salesman can do a better job of selling than the boss, because he doesn't have the thousand-and-one things on his mind that the boss has. The only way an employer can sell better is by giving a discount—and we don't give them. Managing is a full-time job in itself, and requires plenty of good hard thinking."

"We have no sales manager to prod the men into action. It is my job, as head of the company, to watch results and secure harmony. If any of our salesmen encounter any difficulties, I help iron them out—but that is as far as I go."

"My only contact with the men is to watch their sales records from week to week, and to find out what is the matter when sales lag. In talking things over with a salesman whose volume in any or all items is less than it should be, we can almost always discover some reason. Our set-up is such that I have the time and the inclination to help make things run smoothly for the salesmen."



This appliance service department, although operated under the name of L. C. Taylor Co., actually is run as an independent concession. This arrangement makes for cheaper, more satisfactory service, Taylor officials believe, and costs of this work can be computed more accurately.

"The value of placing salesmen on their own initiative is that the sales momentum is maintained even when the boss is away. I can go away for a month and know that things will go on just the same."

"To begin with, we hire only top-notch salesmen. They are paid a guaranteed salary as well as commission. No stated territory is assigned to any man. Thus they all have an equal chance. And when customers move they don't have to switch salesmen."

"We run our business along department store lines, letting our newspaper advertising bring the prospects to us. We maintain no outside selling crew. Work is rotated among the salesmen in such a way that there are three shifts a day from 8 a.m. to 9 p.m., with two salesmen on the floor at all times. All sales are turned over to the men—there are no house commissions."

"We expect our men to keep in constant contact with our users, which they do. This is the only form

of outside contact they make, except to follow up store leads."

"In making out our budget we figure 10% for salesmen's commissions. Five per cent additional goes for advertising to bring the salesmen prospects. And our advertising gets results."

"Every week we run large advertisements on the back page of the local newspaper. To make this advertising more distinctive, we pay 20% extra and have the printing done in color—a turquoise blue. This color is not used to any extent by other advertisers, and we feel that it fits in especially well with electric refrigerators."

"To further aid the salesmen in producing results, we have divided our store into sections, for more effective appliance display. We have duplicate, but separate, displays of the more important items, so that two salesmen can be selling the same item at the same time."

"We don't use high pressure methods. We feel that every woman has a need for what we have to offer, and that if she doesn't buy now she will later. And our men work on a salary plus commission

basis, they don't have to depend upon each immediate sale to keep the wolf away from the door another week."

"Our policy of making working conditions pleasant for the salesmen has meant easier and more lasting sales, and a more stable sales force. One of our men has been with us for 15 years, another for seven. The youngest man, in point of service, has been with us three years."

"Our appliance service departments, although located with us and using our name, are operated as concessions. When we handled our own service work, we almost had to go along on each trip to see what was being done. We stood the losses from mislaid tools and parts that were ordered but never used. When a service man has to stand on his own feet, he will see to it that such things don't happen."

"Under our present arrangement, it costs us \$2.25 to have a refrigerator crated and delivered. When we operated our own department we never knew the exact cost. For the past two years we have figured that our delivery costs ran .019%. But this is not a fixed expense—if sales drop, so do the delivery costs."

### Sam's Selling Slants



V. E. ("Sam") Vining, merchandising manager for Proctor Electric Co., is the industry's most colorful salesman. This is the tenth of a series of Sam's famous "Selling Slants" messages to salesmen. An earlier series was published in the News in 1937, and later was published as a pocket-sized book.

#### WIVES

Did you ever watch a woman read a newspaper?

A man reads the front page, the sports page, the market quotations, the editorials, the funnies—and is satisfied.

Watch your wife. She reads the advertisements.

She has two things in her mind. First, the list of things she needs right now, and second, a list of things she may want in the future.

She is the world's greatest purchasing agent, and the advertisements are her means of keeping abreast of her job.

A man is affected by impressions—a woman wants details.

The man is a casual purchaser; the woman a professional—and knows her business.

She decides what part of town you will live in—what rent you will pay. It is her budget that provides food, clothing, luxuries, and the all important "left-over" purchasing power.

She knows what she wants and she has the money to pay for it.

Yet—

There seems to be a conspiracy among certain types of salesmen and copywriters to treat her as though she still believed in Santa Claus.

When you have something to sell a woman—tell her about it. Be direct—don't beat around the bush.

Don't try to kid her into believing you are merely "demonstrating,"—or "taking a survey,"—she's three jumps ahead of you.

All the time.

Some Big He Man may doubt all this—but the chances are his wife tells him when to get a haircut just the same.

### MANHATTAN V-BELTS

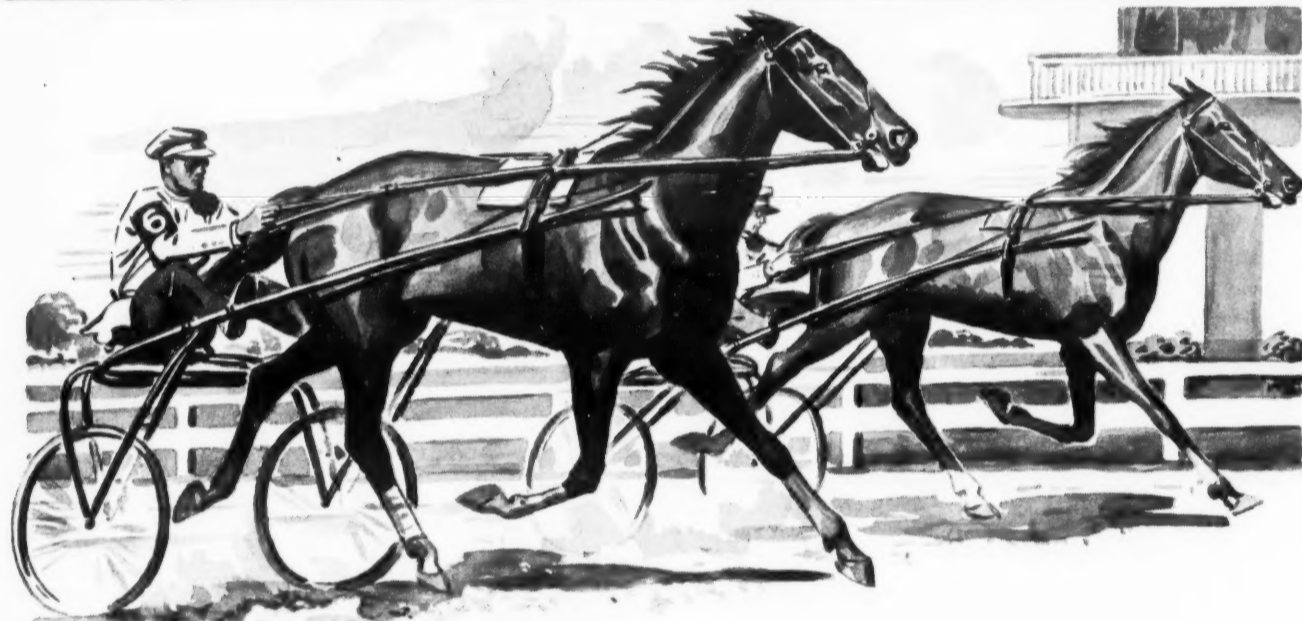
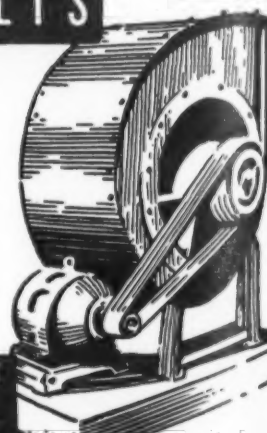
#### for the Service that Saves

**POWER**—because side compressibility makes belt grip the grooves without slip—because flexibility gives uniform "pull."

**WEAR**—because endless cord strength member floats in rubber in neutral axis, resisting internal heat and side wear.

**TIME**—because maintenance and service are uninterrupted.

**THE MANHATTAN RUBBER MFG. DIVISION**  
OF RAYBESTOS-MANHATTAN, INC.  
45 Townsend Street Passaic, New Jersey



## THE FINISH OF THE HAMBLETONIAN

IS A BRIGHT MEMORY IN THE MAKING.

**SYNTEX WHITE  
SYNTHETIC ENAMEL**

*is an ever present symbol of quality to the refrigerator owner.*

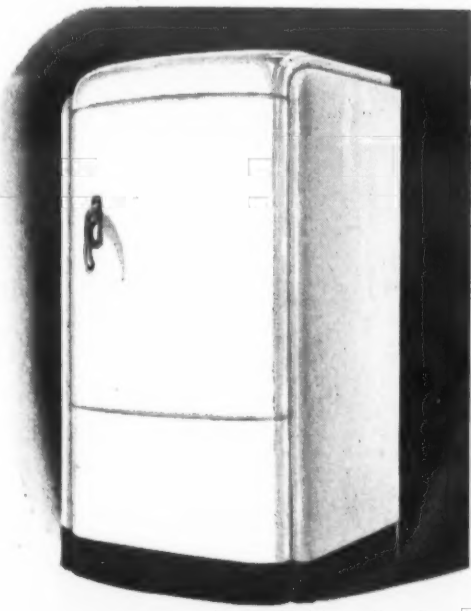
In more than 1,750,000 homes, housewives are deriving daily satisfaction from refrigerators finished in Syntex White.

In many large manufacturing operations Syntex is the standard finish, in others it is the safe alternate.

**JONES-DABNEY CO.**

*Incorporated*

SCIENTIFICALLY CONTROLLED INDUSTRIAL FINISHES  
Factories at Detroit, Mich., Louisville, Ky., Malden, Mass.



## WHAT'S DOING WITH DEALERS

## Norge Leaders Hold Sectional Meetings With Distributors

DETROIT — Norge distributors from eight key cities met at the Detroit-Leland hotel Aug. 14 to discuss product and merchandising plans for the balance of 1940 and for 1941 with Norge President Howard E. Blood, M. G. O'Harra, vice president in charge of sales, and members of the sales staff.

Attending the meeting were distributor organizations from Cleveland, Columbus, Toledo, Cincinnati, Pittsburgh, Buffalo, Rochester, and Detroit. The factory group also included Paul Puffer, sales manager; Earl Bridge, manager of washer and space heater sales; J. M. Tenney, assistant sales manager; and E. J. Kanker, sales manager for gas and electric ranges.

Immediately after the Detroit meeting, the factory men took to the road for a series of 10 sectional meetings throughout the United States which will continue through August and reach the distributor personnel in 51 additional cities.

## Open House 'Fetes' With Complete Meals Shown Staged For Arkansans

LITTLE ROCK, Ark. — "Kitchen parties" of the open-house type have been developed into an effective means of "mass demonstrations" for electric ranges and refrigerators in the territory served by Arkansas Power & Light Co.

Unlike the regular cooking schools, housewives are not asked to attend the demonstration at any specified time. Instead, open house is held for an afternoon or a day, and guests may come at any hour and remain as long as they wish.

Before the party begins, four complete meals are prepared and placed on display in the dealership where the demonstration is to be held. Refrigerators are filled with salads and desserts, and ranges and other appliances are operated throughout the open-house period, to illustrate modern food preparation and serving. Guests may operate any of the appliances displayed, to see at first hand how they work.

Average attendance at these "kitchen parties" is about twice that of ordinary cooking schools, reports Miss Elizabeth Mosley, home economist.

## 5,000 Customers Listed on Large Display Board In Goodling's Sales Room

YORK, Pa. — One means used by H. E. Goodling Electric Co., local appliance dealer, to impress its refrigerator prospects is a type-written list of approximately 5,000 refrigerator customers posted on a large display board in the sales room.

This list is divided according to streets in the city, so that when a prospect examines the list she can readily spot the names of all the users in her own neighborhood.

As an even more convincing argument, prospects are invited to ask any of these users about their experience with the unit which they bought from the Goodling store.

## Crosley Dealers Attend New Appliance Showing

ST. PAUL — More than 200 dealers from Minnesota, North Dakota, and Wisconsin attended the showing of 1940 and 1941 Crosley appliance lines held here recently by Motor Car Equipment Co., Crosley distributor.

F. F. Hutchinson, vice president of the distributorship, presided at the meeting. He was assisted by A. J. Newman, Crosley district manager.

## High-Flying Dealers and Salesmen To Fly High After St. Louis Drive

ST. LOUIS — High-flying dealers and salesmen in the territory of James & Co., General Electric distributor here, are slated to do some real high flying at the end of August, when the 18 men with highest sales volumes will be rewarded with a one-hour 150-mile air trip over the city on Chicago & Southern's new flagship.

This trip is being offered as an incentive to salesmen to "clean up" on unsold prospects left over from St. Louis' General Electric Week which the James company sponsored here not long ago.

## Kelvinator's 555 Doubles Little Rock Area Sales

LITTLE ROCK, Ark. — Breaking all previous sales records in the Little Rock territory, the retail sales organization of 555, Inc., Kelvinator distributor, more than doubled its refrigerator sales during the first six months of this year as compared with the same period of 1939.

More than 30 carloads of Kelvinator refrigerators have been received by the distributorship so far this year.

## Columbus Appliance Shop Moves To New Quarters

COLUMBUS, Ohio — Fisher Appliance Shop has moved to new quarters at 252 South Fourth St. The firm, which was formerly located at 107 East Long St., is a dealership for Stewart-Warner, Norge, and Gibson refrigerators, and Maytag washers. H. J. Fisher is the owner.

## Dealer on Super Road; 7,000 Cars Pass Daily

GREENVILLE, S. C. — D. Frank Williams has opened a "super refrigerator dealership" on the super-highway between Greenville and Spartanburg, handling Warren cases, Copeland condensing units, and National fixtures.

Offices of the dealership are air conditioned, and the layout includes a soda bar to serve customers and motorists passing by. It is estimated that 7,000 cars travel the highway daily.

Offices and display rooms measure 24 x 60 feet, and a 60 x 60 building is devoted to storage, with a machine shop in the basement.

## New Westinghouse Dealer In Fayetteville, N. C.

FAYETTEVILLE, N. C. — Mc-Rainey Electric Co. has been appointed Westinghouse dealer here.

## Annual Wisconsin Frolic And Golf Party Sept. 18

MILWAUKEE — Annual industry frolic and golf party of the Wisconsin Radio, Refrigeration & Appliance Association has been set for Sept. 18 at the Merrill Hills Country Club, near Waukesha.

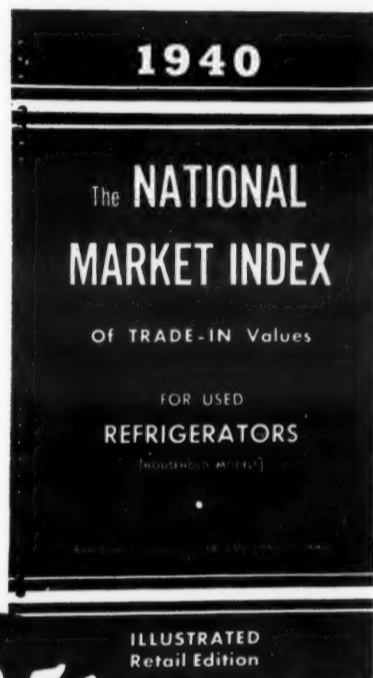
W. H. Roth, president of Roth Appliance Distributors, is general chairman of the committee in charge of the event. Sub-chairmen include Frank W. Greusel, prizes and attendance; Jack Mehr and W. D. Baker, golf; Al Hass, baseball; and Oscar Goelzer and Gordon Ische, games and general entertainment.

Program will consist of softball and a special warm-up golf contest in the morning, a group luncheon at noon, golf tournament during the afternoon, and fellowship dinner and awarding of prizes in the evening. Invitations are being extended to a large list of persons affiliated with the electrical appliance industry, in addition to the members of the association.

With new sales on the decline get after Replacements with

## The National Market Index!

4 reasons why your salesmen should trade with the index . . .



1. You can CLOSE YOUR SALE while in the store because the box can be identified and evaluated.
2. Trade-in allowances are designed to allow the dealer to make a normal profit on BOTH the new box and the trade-in box.
3. The customer's argument about "what my refrigerator is worth" can be broken down by showing illustrated refrigerators and values.
4. It establishes a basic schedule of trade-in prices so as to prevent "cut throat" practices.

★ ★ ★ ★ ★

A survey made by the Associated Refrigerator Plant, Inc., Philadelphia, Pa., of approximately 2000 trade-ins among several makes indicates that 95% of these boxes were manufactured between 1927 and 1933. A conservative listing and evaluation of these models is essential to every salesman if he is to effectively combat the customer's inflated sense of values.

## SURVEY

	1928	1929	1930	1931	1932	1933	1934	1935	1936	Total
FRIGIDAIRE	182	178	18	36	38	100	12	16	2	582
GENERAL ELECTRIC	...	72	524	96	84	66	62	...	...	904
KELVINATOR	...	70	48	64	64	84	26	6	...	362
NORGE	...	...	...	98	30	42	8	...	...	178
WESTINGHOUSE	...	...	...	52	36	2	2	...	...	92
Totals	182	320	590	346	252	294	110	22	2	2118

\* Lots of 50 or more \$2.50

## What Leading Authorities Say About NATIONAL MARKET INDEX

"We are indeed very much pleased with the progress we are making through the use of your trade-in plan. It has done much to organize a systematic method of trading in old refrigerators by which all dealers can fairly compete."

(sgd.) Delaware Power & Light Company, Wilmington, Del.

"This book will be very useful to anyone dealing in refrigeration and is something that has been needed for some time."

(sgd.) Hunter Mann, Crosley Distributing Company

"I think this a very useful tool in the hands of anyone engaged in the sale of refrigeration. Please enter my order for another copy."

(sgd.) John D. Cassidy, Sales Mgr. Kelvinator, Division of Nash-Kelvinator

"A Blue Book of Trade-in allowances and a central plan for reconditioning used refrigerators are helping Philadelphia dealers make money on trade-ins."

(sgd.) Electrical Merchandising, April, 1939.

"May I add that the National Market Index is of inestimable help in guiding us in trade-in transactions; will probably eliminate cut-throat practices, and enable dealers to allow fair valuations on trade-in refrigerators."

(sgd.) T. M. Robertson, Upper Darby, Penna.

Send check to: National Refrigerator Index Publishing Co. Inc., 3028 W. Hunting Park Ave., Philadelphia, Pa.

# American Refrigeration Man Tells Vivid Story of Life In Embattled France

## His Job Swept Away By War, E. R. Harris Volunteered For Hospital & Relief Work

MADISON, Wis.—An eye-witness picture of conditions in France during the early days of the Nazi blitzkrieg has been brought back to the United States by a representative of the refrigeration industry—E. R. Harris, an American citizen who has lived in France for 35 years, and who, when the war broke out, was domestic refrigeration sales manager for Markt & Co., Kelvinator agency in that country.

After the declaration of war with

Germany last September had put an end to nearly all private business in France, Mr. Harris drove a truck for the American Hospital in Paris, delivering medical supplies to the three hospitals in Paris, Chateauroux, and Etretat.

He was one of the 1,787 American refugees who reached New York City on the United States liner Washington, which was threatened by a German submarine after it had left Lisbon.

Although actual hostilities did not begin until last September, the "ghost of war" hovering over Europe had resulted in a slackening of sales as early as the fall of 1937, Mr. Harris reports. This was true in all lines of business, and not in refrigeration alone.

"The only thing that was doing pretty well was the servicing end of the business and the sale of spare parts to the various service stations throughout France and the colonies," he said, "and I had an interest in some concerns that were manufacturing room thermostats and solenoid valves. This business was merely starting, and went on fairly well until September, 1938, the time of the Munich Conference.

After the partial mobilization of the French army, it was very difficult during the early part of 1939 to find bronze castings, electric wire, and all raw materials for the construction of this control apparatus. This was, of course, due to the fact that nearly all raw materials had been requisitioned.

"We kept on going on our stock until September, 1939, when war was declared, and this put a stop to all civilian business transactions. During the first days of September all shops, stores, etc. were closed in Paris, and civilians fled from the capital, fearing air raids, bombing, and gas attacks.

"I had my choice of two things: either come back to America or join up in France with some American relief organization. As I had already served during World War I with the Harjes section, No. 5, of the American Ambulance Service (American Hospital, Neuilly), I thought that for the present the best thing for me to do would be to join up again with the American Hospital in Paris. I knew Dr. Edmond Gros, who had also served with the French army in 1914, and who was the creator and chief of the Lafayette Escadrille in France in 1914.

"The American Hospital in Paris had been requisitioned by the French Department of Health of the war office for military purposes, and in exchange for this requisition the French authorities gave us the Casino and Golf Hotel at Etretat, fashionable seaside resort near Le Havre.

"Our first move was to transport such patients as would not suffer from the trip from our Paris hospital to this new hospital. We installed at Etretat all patients that could stand the trip by automobile, and the serious cases (about 40) remained in Paris. All this convoy work had to be done through the volunteer help given to us by the American colony in Paris, who put themselves and their cars at our disposal. It took us about two weeks to do all this evacuating.

### Contributions Solicited For Alsatian Refugees

"In the early part of October, the Bishop of the American Cathedral in Paris called upon all Americans in France, asking if they would bring to the cathedral all kinds of old clothes, blankets, baby clothes, shoes, etc., with a view to using these articles as relief to the Alsatian evacuated population, located in the center of France around Poitiers, Angoulême, Périgueux, etc. After about a week's gathering of all these articles, about two truck loads were sent out, with Dr. Gros as chief of the mission, two Alsatian-speaking nurses, and two doctors.

"We spent a week in small villages near the above-mentioned towns, distributing supplies and bringing all the medical relief we could. The small amount of relief materials we had was not sufficient to meet the need, but nevertheless it was a beginning.

"In the latter part of November, we received necessary funds through an American Quaker society to do relief work among our Alsatian refugees, and immediately opened a hospital-clinic at Chateauroux. At that time we also received our first

shipment of medical supplies from the American Red Cross.

"My principal work was to go to the two French ports, Bordeaux and Le Havre, and take delivery of all kinds of Red Cross supplies, mostly such articles as X-ray apparatus, hospital beds, mattresses, bed sheets, blankets, operating tables, sterilizers, and also including ice water coolers and five Montgomery refrigerators. For four months I was busy transporting these goods from the ports above mentioned to our three hospitals in Paris, Chateauroux and Etretat. During the winter months I covered over 15,000 miles to accomplish that work.

"Very often, in the towns where I used to stop overnight, we would be awakened by sirens signalling air raids somewhere over or near the city, but as there was no bombing of any sort, we were not very frightened and did not make for shelter. It was only in April that I met with some actual air raid bombing, but the raids were at that time quite scarce.

### Period of Boredom Was Calm Before Storm

"We had also formed a section of 12 ambulance cars through donations. These were situated at the American hospital in Paris, and driven by American women volunteers. I was in charge of the mechanics of the section, but had not very much work to do, as during this early period there were very few wounded. These cars were mostly employed to carry wounded a few times a week from some station in Paris to a hospital, and by the end of April all the women drivers were bored by the inactivity.

"I myself found things so dull that I had made up my mind to sail on the Washington for New York during the early part of May, and had made arrangements for passage on May 15 from Genoa.

"I used to call at the hospital every morning around 9 o'clock. On Friday, May 10, I walked in and found everybody very quiet and wearing a very strange look. I went out and bought a newspaper, but did not find anything special in the news. Coming back to the hospital, I asked one of the doctors, who used to have breakfast with me, what was going on—what was the matter with the crowd.

"He told me that they had picked up on the radio during the night the news that the German army had walked into Holland, Belgium, and Luxembourg at 3 o'clock in the morning. From now on, he said, there would be plenty of work to do.

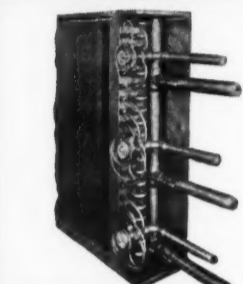
"That same night we had a big air raid, with bombing somewhere in the Paris suburbs. I found out later that it was the junction station at Vélizy-St. George that had been hit and set on fire.

"On Saturday (May 11) we received a call from the Belgian Red Cross, asking us if we could send some ambulance cars to Brussels; on May 13, after having received the proper passes, we sent up four cars, with eight women drivers, but unfortunately these cars never reached Brussels. They got up two-thirds of the road, and a short distance past Lille were ordered to come back.

(Concluded on Page 7, Column 1)

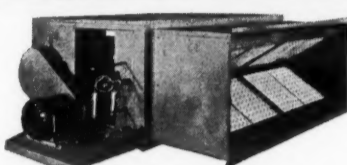
## Marlo Coil Co.

6135 MANCHESTER AVE.,  
ST. LOUIS, MO.



Air Conditioning Coils—  
Blast Coils

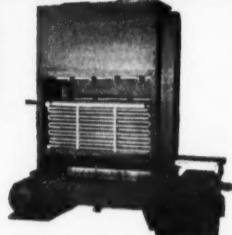
Extended surface coils for all refrigerants. Made of any of the common metals. Blast coils for steam, water, or brine. Complete details in Bulletin No. 396.



Air Conditioning Units

Air Conditioning Units in either ceiling suspended or floor type. Capacities from 900 cu. ft. to 12,000 cu. ft. Sturdily built on welded angle iron frames of sectional design for easy installation. Bulletin No. 409 gives complete details.

Refrigeration Equipment  
Manufacturers

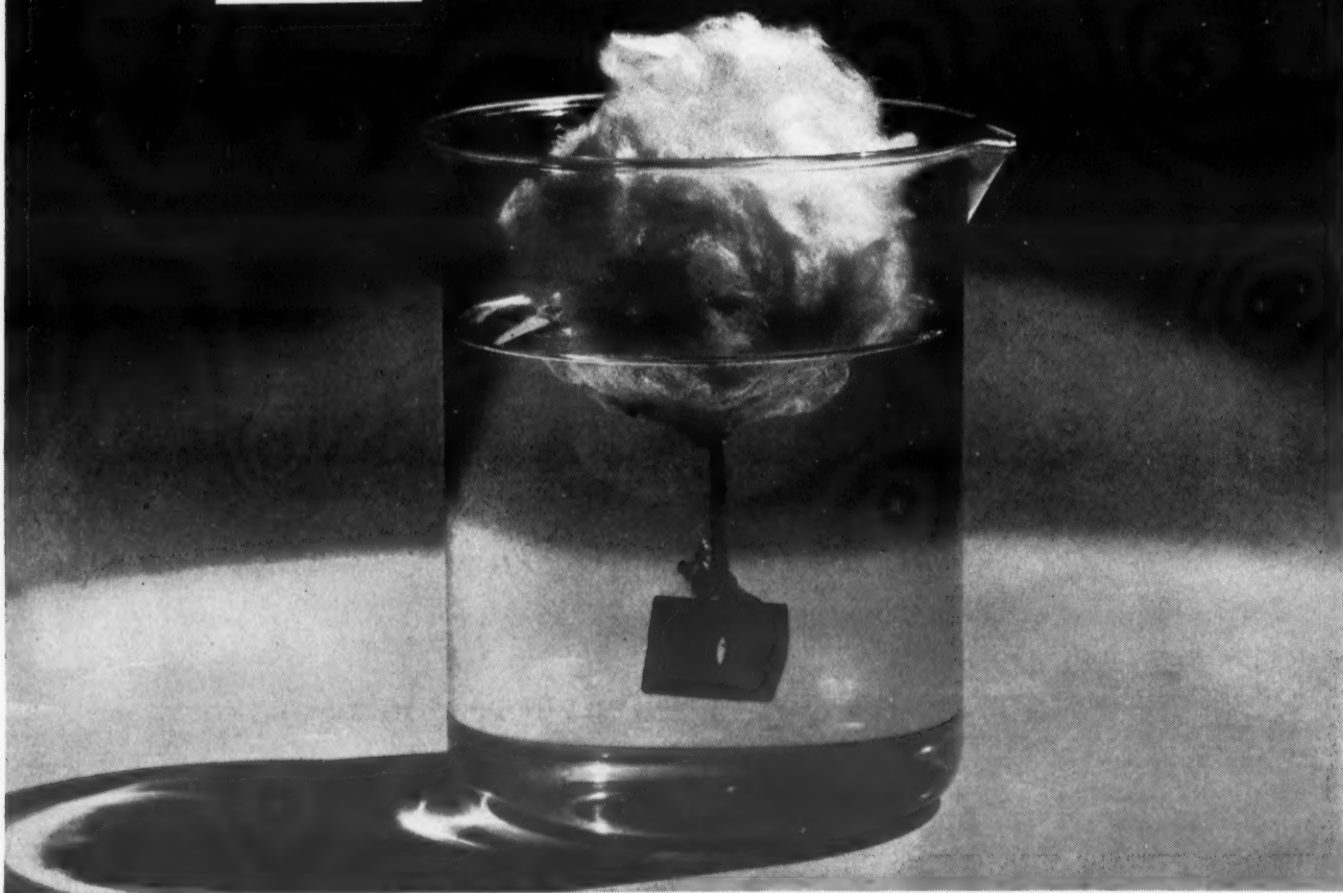


Evaporative Condenser

Self-contained; single motor drive for fans and pumps; all prime surface coils; electric welded frame galvanized after fabrication; internal surface covered with corrosion resistant mastic. Full details in Bulletin No. 404.

Y-5R1.

## You Can't Keep a Good Insulation Down!



### Dry-Zero Bound-Batt Costs Less—Is Easier to Install

Now the over-all cost of Dry-Zero is no more than ordinary insulations. The new Bound-Batt can be purchased in rolls and cut to size, or prefabricated to special sizes at the factory.



Tie a weight around a piece of insulating material. Drop it in a beaker of water. Leave it there for a few days and watch to see what happens. A good insulation will remain floating on the surface without soaking up any of the water.

This moisture repellence is essential in any insulant. Without it, the insulation will blot up the drops of atmospheric water vapor that condense on the cold inner walls of the refrigerator. It will get soggy and lose its heat-stopping efficiency. Dry-Zero is naturally water repellent (non-hygroscopic). It sheds water "like a duck's back." Hence, it never loses its insulating efficiency.

Dry-Zero is ideal for commercial and household refrigerators. It has a "k" factor of 0.24—the lowest of any commercial insulant. It does not rot, pack, or absorb odors. And, in the new Bound-Batt form, Dry-Zero is lower in first cost and less expensive to apply. Write, Dry-Zero Corporation, 222 North Bank Drive, Chicago; or 60 E. 42nd St., New York.

## SOFTNESS

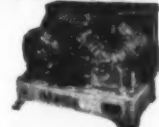
You get it in WOLVERINE TUBING

—Buy From Your Jobber—

WOLVERINE TUBE CO. DETROIT

## SERVEL Silver Fleet COMMERCIAL REFRIGERATING MACHINES

"Beauty is only skin deep" . . . but under the lustrous silver surface of these sensational new Servel units, you'll find a degree of performance, economy and noise-



lessness never before available in low-pressure refrigeration. Write today for details. Servel, Inc., Electric Refrigeration and Air Conditioning Div., Evansville, Ind.

# DRY-ZERO INSULATION

## Leaving War-Torn France Only At Last Call, American-Born Refrigeration Man Escaped Blitzkrieg By Sailing on S. S. Washington

(Concluded from Page 6, Column 5)

"Another American organization which answered the same call sent 12 ambulances, but as they were driving through Amiens they were hit by a bomb. The convoy lost four cars, and eight drivers were badly hurt. We did not know what had happened to the rest of the convoy.

"On May 13, I was ordered to take a truck and hurry to our hospital in Chateauroux to get the X-ray apparatus and all sorts of supplies, and to rush them to our hospital in Etretat, where they were badly needed. Total value of the supplies to be moved was about \$15,000.

"The distance between Paris and Chateauroux is about 200 miles, and it took me over 24 hours to cover it. I had to stop continuously on account of air raids over my route.

"After loading my truck in Chateauroux the next day, I started toward the north of France to make Etretat. As I reached the town called Negent de Retrou, I ran into the first flow of refugees, in automobiles and all kinds of vehicles, from the north of France and Belgium. All roads were blocked, and the traffic was absolutely terrible.

"The French authorities stopped me and said there was no use for me to try to go on any farther, because I would be running into military convoys of all sorts. I was ordered to return to Paris.

"After a day's discussion and numerous telephone calls between the French authorities and our American hospital in Paris, I was allowed to try to do my best to reach Etretat.

"I could only travel about eight miles an hour, so badly were the roads blocked, and as I was going through Evreux I was again stopped by the authorities, who told me not to attempt to continue my trip on the main road; not to cross the Seine river at Pont de L'arche, as the bridge was likely to be destroyed any minute, but to cross the river by the ferry boat at Lilleboune.

"I reached the boat landing, where I had to wait five hours because the ferry was not working on account of enemy planes flying over oil tanks at Lilleboune. This was the big Standard Oil district and the gasoline reserve town for the French army.

### 'It Can't Happen Here,' French People Thought

"After getting on the other side of the bank safely, I rushed up to Etretat and unloaded all my supplies. On my way back to Paris I stopped at the seaport of Fécamp, where I knew some British army men.

"While I was having lunch with them, I asked the reason why they had not been removed to Abbeville and Amiens, where I imagined the fighting was going on. They told me it would not be very long before fighting would be going on right in that spot, and that they were expecting some German advance guards very shortly. Realizing that all the supplies I had just brought up would be lost, I started back for Paris.

"When I told people in Paris what I had seen and what I was expecting, they all just laughed and said I was telling them fairy tales; that the Germans would NEVER get as near as that. We all know what happened.

"During my trip, the American consulate in Paris issued an order to all Americans to make their way to Bordeaux, and announced that no passport would be renewed and that

the Washington would most likely be the last ship sailing from Bordeaux. It was scheduled for June 8. So I thought it better to obey these orders and make arrangements to find passage on the boat."

Trains bringing south residents of Belgium and northern France were in a deplorable state, Mr. Harris said. Thousands of persons were crowded into space intended for a few hundred, and many of them remained on the trains for six and eight days without food or water, not knowing even where they were going.

Fortunately, Mr. Harris still had his Lincoln car, and even though it was difficult to obtain gasoline, he decided to drive to Bordeaux rather than take a train. It took him three days to get there, although the distance was only about 400 miles, because he could buy only three gallons of gas at a time, and had to make many stops.

When he arrived at Bordeaux, he sold the car, which was still quite new, for \$30—all he could get for it in a hurry.

### Return Voyage Fraught With Drama & Hardship

The Washington left Bordeaux on June 8, and despite crowded conditions was comfortable. There was plenty of food. Five hours out of Lisbon, the ship was stopped by a German submarine, which threatened to torpedo it.

"The submarine was about four miles off, and we couldn't see it," Mr. Harris says, in recounting the experience, "but it was still dark and we could see the light flashes as they talked with our ship in code. The captain of our ship was talking over a loud speaker, telling both the crew and passengers what to do. The sailors were taking the covers from the lifeboats as we came out of our cabin, and in a few seconds the boats were hanging over the sides of the ship, awaiting further orders.

"There was a great deal of flashing back and forth between the ship and the submarine, and then the captain ordered passengers to get into the boats. When some of them were partially filled, there was another signal from the submarine, and we were told to leave the lifeboats, that everything was all right.

"The remainder of the trip was uneventful. We saw one other submarine, in the distance, and passed a convoy of 20 Canadian ships. There was a persistent rumor that something unpleasant had happened on board, but no one seemed to know what it was, and nothing definite was ever made known.

"There were signs on the ship warning passengers that this was no pleasure cruise—and it wasn't. We had three sittings for every meal; there was stringent conservation of both drinking and washing water, and the bathrooms were locked every afternoon between 2 and 5 o'clock. In spite of all this, we were charged double fare for passage. No passenger list was printed."

Chief role of refrigeration in the war, outside of general food storage, has been in the conservation of human blood, Mr. Harris said. To serve that purpose, the French government requisitioned a number of units, and installed them in all the French military hospitals.

As to the future of American refrigeration equipment in Europe, Mr. Harris has this to say:

"Whether the Allies are winners or losers, I venture to say that America will not play the role in the future that she did during the pre-war period, for two simple reasons:

"If Germany wins, she will doubtless control the entire refrigeration business in Europe. Germany produces some very good machines in both the household and commercial field. Examples of good commercial units are the DKW and the Frigityl. In the domestic market, the Bosch Co. at Stuttgart introduced a unit on the French market in 1936 that was highly competitive against American lines during 1937 and 1938. Prices on these German machines were very low, and many companies were selling units to French cabinet builders who were marketing their equipment throughout the nation.

"On the other hand, if the Allies come out on top, the big question for them will be how to employ the factories, machines, etc. with which they have for the past several years been manufacturing airplanes, ammunition, guns, and other military supplies. Most likely, some of these plants will be used to turn out compressors and all kinds of materials

that previously were imported from the United States.

"That is one of the reasons I have come back to this country, and I am looking now toward South America, where I believe a big market is about ready to open."

### French Market Limited When Harris Started

Mr. Harris entered the refrigeration industry in 1924 as a salesman for Frigidaire in Paris, and during his first year succeeded in landing several important deals.

In those days, both household and commercial markets were limited—the former to the upper class of French people who had gained a knowledge of refrigeration while traveling in America, and the latter to the merchants with highest credit ratings, because of high prices of the equipment. Household units were the biggest sellers in the commercial market, because of their comparatively lower prices.

In 1926, Mr. Harris became commercial director and technical advisor

of the "Neve" company, established in France by an Italian concern, "Nordfrigor," and turning out a line of compressors similar to the American type. This company now is one of the two largest household refrigerator manufacturers in France, the other being the Bonnet Co., of Lyons. With a price one-third lower than competition, the company sold 2,000 units during its first year.

As commercial competition became more keen, Mr. Harris sensed the possibility of selling household lines exported by American manufacturers.

When Markt & Co. entered the field as Kelvinator agency in 1933, Mr. Harris was appointed domestic refrigeration sales manager. The household line was not expected to be a very important item, the company anticipating most of its business in the commercial market.

The company's showroom was located on the Avenue Friedland, with a full household line. Sales went the opposite of anticipations, however—the commercial line didn't gain in volume, but the domestic turnover, in 1937, was five times what it had been in 1933.

## FIRST CHOICE because they're The LAST WORD in

Maximum  
Convenience

Minimum  
Cost



The SHUCKER TRAY




The TILT OUT TRAY

Ice trays by Inland are the first choice for original factory equipment by leading makers of automatic refrigerators—and for replacement sales by dealers, because they are the last word in fast-freezing, quick-releasing ice cube convenience.


These two Inland Magic Finish Ice Trays make old style trays as unnecessary as weak, watery ice cubes. In a flash, these modern ice trays by Inland give you a few cubes at a time or a brimming bowlful... instantly, full-sized and unshattered.

For superswift, maximum convenience, it is the Shucker Tray all the way. And for the quick-release feature, at minimum cost, it is the Tilt Out Tray on every count. In short, for maximum convenience—for minimum cost—it's ice trays by Inland, the choice of refrigerator makers, jobbers and dealers. For details, prices and discounts, write to


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**INLAND**

## AIR CONDITIONING & REFRIGERATION NEWS

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F. M. COCKRELL, Founder

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AUGUST 21, 1940

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## New Angles To Commercial Selling

OUT of the welter of chaotic conditions which have characterized the commercial refrigeration merchandising picture during the last few years, a few fairly-well-recognized tenets are beginning to be established.

These tenets, it would appear to some observers, are signposts pointing toward a new stability in this branch of the refrigeration industry.

### What Some Observers Say About the Commercial Field

It is now being said that:

(1) The old order is definitely over; control has passed from centralized direction by manufacturers into the hands of salesmen in the field.

(2) Men who either are experienced salesmen of refrigerated display cases, or who have spent many years in that field in the past, are now prominent in the merchandising of all types of commercial refrigeration products (including machines), with the possible exception of beverage cooling equipment. This is particularly true in the bigger cities; in the smaller towns, combination (both household and commercial) refrigeration dealers dominate the field.

(3) Most known markets for commercial refrigeration are by now so well saturated that new equipment sales consist largely of replacement business. Considerable thought and effort, however, are being placed behind attempts to locate and develop new markets.

### Today 'Appearance' Sells More Equipment Than 'Economy'

In the halcyon days of manufacturer-distributor-dealer operations, salesmen who specialized in compressors and coils did a land-office business with food retailers and servers by demonstrating the economy of mechanical refrigeration as compared with ice.

Now that mechanical refrigeration is so prevalent, however, the story is different. Today new commercial refrigeration equipment is sold on appearance, on its aid in merchandising food products. Modernization is the new theme, supplanting economy.

And so it is that the men who are successfully selling commercial refrigeration equipment nowadays to food retailers are men who know the food retailing business. These salesmen can slice meat, wait on customers, arrange displays, draw up new store layouts. Their story is more customers plus more sales per customer through new equipment, rather than decreased operating costs. In brief, it is a positive, rather than a negative, line of reasoning.

### Case Salesmen Represent Machine Manufacturers

So successful have these salesmen been that several makers of refrigerating machines have negotiated deals with case manufacturers who have national selling organizations. Thus these case salesmen are now machine salesmen, as well. One such case manufacturer reports that his direct salesmen have sold more machines than cases so far this year!

Contrariwise, the few successful remaining national sales organizations of machine manufacturers have wisely hired former case salesmen (or men who knew the food retailing business) to replace the "sales engineers" of old.

### Purchaser Likes To Hold One Firm Responsible

Successful independent dealers in the commercial refrigeration field nowadays sell the complete unit, or any of its component parts. They have found that the purchaser holds the machine dealer responsible for the functioning of the case, and vice versa. (In the past, there has been considerable buck passing on this score among dealers who have divided the business.)

In so doing, they have found that they do not need to be technical experts either on machine design and service or case design and service any more, because the dependability of both products has improved measurably in recent times.

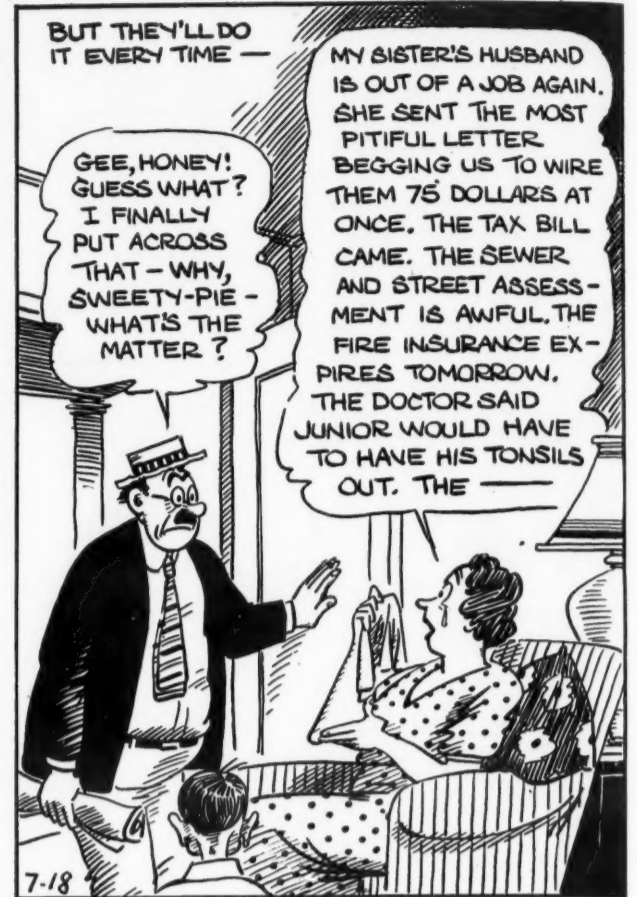
### All Commercial Equipment Is Improved In Design

Case manufacturing has shown especially commendable progress in the last few years, and even further improvements are in the offing. Nor has the machine industry lagged in better design. The development of neoprene gaskets is just one example of service-eliminating design features of some of the new machines.

Efforts of the Commercial Refrigerator Manufacturers Association to foster sound business practices—particularly as to terms—have been signally successful. More work will be done along these lines, officials of the association declare.

Thus it would appear that a semblance of order is arising from what has been considered an exceedingly chaotic field. And the elements of a design for a new distribution system are beginning to take shape.

## They'll Do It Every Time . . . By Jimmy Hatlo



## LETTERS

### Sure, and Then We'll Fly Over & Shave Off Hitler's Mustache

The Harry Alter Co.  
1728 S. Michigan Ave.  
Chicago, Ill.

Dear George:

Since writing you about the way the industry has developed an unwieldy vocabulary, starting with the word "refrigeration" (thirteen letters of bad luck to hundreds of ghost manufacturers), I hit upon the germ of an idea that only you and the News could put over.

As you know, Frigidaire is a brand name, but we constantly hear people say, "I have a Norge frigidaire," or "My Westinghouse frigidaire," etc., etc. So unquestionably Frigidaire is a generic term, and would be in the dictionary except for its property rights vested in General Motors.

Now the generic use of Frigidaire by the public must be a pain-in-the-neck to the Frigidaire ad-men. That always presents a real problem in writing copy and also in field selling. So why not sell General Motors on the idea of giving the word to the industry, and abandoning their property rights to it? Then we, as an industry, could apply the word "frigidaire" to any refrigeration equipment. The public, and the trade, would benefit by avoiding present confusion. There would be, under this scheme, G-E frigidaire (either commercial or domestic or air conditioning), Kelvinator would put out beer frigidaire, or home frigidaire, or ice cream frigidaire. Dealers and distributors of any equipment would be merely sellers of frigidaire. Think what a euphonious something this sign would be—"Frigidaire Repair."

Would the Frigidaire company agree to it? The value of the Frigidaire name might be worth several million dollars, but that should be no hurdle to a super-salesman like you, backed up by the prestige of the News.

You must admit the idea is good, anyway.

HARRY ALTER,  
President

### Business as Usual In Switzerland

Office for Industrial Information  
5, Rue de Rhone  
Geneva, Switzerland

Editor:

We have your letter of May 15 and thank you sincerely for the two issues of AIR CONDITIONING & REFRIGERATION NEWS as well as for the copy of Manual No. F-1 "Theorie et Principes de la Refrigeration Mecanique."

We shall be glad to publish a mention of your publications in one of our next bulletins and, besides, we are submitting them directly to certain firms. We hope we can interest some people in them.

The 1940 edition of our Directory of Machines, Apparatus, and Tools will be out within about one month's

time. We shall be happy to send you a copy upon publication of the same, i.e. in the course of July.

We take this opportunity of enclosing an editorial note in re to our above mentioned Directory which you would perhaps be kind enough to publish in one of your next issues of AIR CONDITIONING & REFRIGERATION NEWS.

HUGO BUCHSER,  
Manager

Editorial Note: Directory of Machines, Apparatus, and Tools.

We have just received a copy of the latest edition of this directory, in pocket size, covering the Swiss machine industry and the various lines connected with it, such as the electro-technics, high precision mechanics, instruments, etc.

Every year, this important and well known reference book is sympathetically received by thousands of manufacturers and representatives all over the world. This compilation owes its present stage of perfection to a long and exhaustive study of the whole Swiss industry. Systematically arranged in four indexes to classifications, in English, French, Spanish, and German, showing about a thousand partially illustrated categories, this book may serve at the same time as a technical dictionary for the metal industry.

The book is selling at Swiss francs 10.—(\$25.00). It may be obtained against pre-payment from:

Office for Industrial Information  
5, Rue du Rhone, Geneva, Switzerland

### Government Is Curious About Locker Storage

C. H. Nissley  
U. S. Dept. of Agriculture  
Extension Service  
New Brunswick, N. J.

Sirs:

Will you kindly send me a copy of your manual LS-1, which I believe includes the latest information and recommendations regarding the use of individual lockers in cold storage plants. If there is any charge for this book, kindly enclose bill and I will forward remittance by mail.

I have had numerous requests from farm women and others regarding the use of these lockers in the preservation of fruits and vegetables and although reports are contradictory in the various sections of the country, I feel that I should have all the information possible regarding the development of this rather recent and growing practice.

C. H. NISSLEY,  
Extension Horticulturist  
Vegetable Growing

### Air Conditioning For Trucks

The Stanley Works  
New Britain, Conn.

Editor:

We have two demonstration display trucks on the road, and are desirous of finding some type of cooling or air conditioning equipment for these trucks.

Could you furnish us with names of manufacturers who would be apt to make this kind of equipment?

L. S. KNOUSE,  
Sales Research Manager

Answer: The matter of providing

air conditioning for moving vehicles has been pretty much confined thus far to the air conditioning of buses and there are no standard systems built for the purpose which you desire.

You might have the best luck in contacting a couple of the principal local dealers in commercial refrigeration equipment. They might be able to install a truck cooling system to suit your purposes.

### Gilead's Balm . . . from Colorado

The Gates Rubber Co.  
Sales Division, Inc.  
Denver, Colo.

Editor:

I can't begin to tell you how much we are getting out of your magazine. I believe we get two copies of AIR CONDITIONING & REFRIGERATION NEWS every week, and I know that there are at least fifteen people handling each one of them. I know that one of them comes to our department after everyone has perused it, and I rarely clip less than a dozen items from it weekly.

RAY G. SMITH,  
Market Research Department

### . . . from Uruguay

Ferrosalt S. A.  
18 de Julio 1202  
Montevideo, Uruguay

Sirs:

We should be obliged if you would send us by return mail book post manuals Nos. C-1, C-2, and C-3, A-1 to A-7 inclusive, and B-1.

We enclose bank draft for U. S. A. \$12.00.

Since we have become subscribers to the AIR CONDITIONING & REFRIGERATION NEWS, we are pleased to tell you how we appreciate and look forward to the arrival of each mail for our copy of your useful and most interesting journal.

FERROSALT S. A.

### . . . from Texas

Box 1118  
McCamey, Texas

Sirs:

I received your letter and the copy of your paper and I think the paper is excellent. It is certainly a great help to a man interested in this work. Enclosed you will find a subscription to your fine paper.

J. L. KING

### . . . and Pennsylvania

Interstate Service Co.  
1403½ N. Murtland St.  
E. E. Pittsburgh, Pa.

Sirs:

We think you have been doing a fine job presenting news and useful information on industry affairs and methods in AIR CONDITIONING & REFRIGERATION NEWS.

Enclosed is a check for \$4.00 to cover cost of a year's subscription. Will you kindly forward the June issues which we have missed very much.

J. P. SCHAEFER,  
President

## 'You Want It, We've Got It, Let's Go' Is How Popkys Put Prospects 'on the Spot'

Ability To Handle the Whole Job (If They Can't Get It, They Build It) and Colored Sketches of Proposed Jobs Are Helps In Fast-Closing Sales Technique



Left to right: Louis Raker, salesman, and Louis Popky and Harry Popky work out specifications for a job. Colored sketches are often used.

By Robert M. Price

WILKES-BARRE, Pa. — Putting prospects squarely "on the spot" has increased by 200% the business of Popky Freezer Co., York distributor and manufacturer of "Air-Flow" beer cooling equipment.

The "on the spot" technique employs no strong-arm, come-across-with-the-order-or-else methods, but salesmen concentrate on getting the prospect to commit himself to "yes" or "no" so that selling time is cut and the drawing of specifications and actual installation of equipment is no long drawn-out process. High-pressure selling? Not so, according to Harry and Louis Popky, firm members.

It's the ability, they say, to offer the customer exactly what he wants, and backing up the offer with a large bank of satisfied users and key installations. By referring the prospect to a user having an installation similar to that wanted by the prospect, salesmen are able to say—"You want it, we have it, let's go."

Of course, sales are not as simple as all that. Every sale in commercial refrigeration or air conditioning takes groundwork, promotion, planning, and follow-through to put the prospect in a position to be sold "on the spot."

Direct mail is flooded through the

sales territory. Some piece goes out to every customer and prospect every three weeks. On these pieces is published a list of users in the territory so prospects can "see for themselves." Next, salesmen contact users continually to pick up leads and to check on equipment satisfaction, thus insuring the possibility that users become enthusiastic salesmen.

When a job is landed the specifications crew goes into action. Every detail of the job is carefully worked out holding close to the suggestions of the customer. The firm specializes in unusual installations. On many jobs of this kind a commercial artist is called in to draw up a color sketch of the job. This has proved to be a real closer, and the color sketches can be used in folder form to sell other jobs.

"Here's an example," Louis Popky said, showing a sketch of a bar job that was installed. The sketch was labeled "Cool-Cave Bar." The plan called for a bar in the basement of the hotel, pre-cooler next to the bar, and a beer dispensing unit on the upper floor. The lower room was designed as a stone cavern with the front of the bar and the pre-cooler covered with stone to carry out the "cave" theme. From the top of the

pre-cooler an artificial palm tree rose. Through the center of this tree ran the duct carrying beer lines from the cooler up to the dispenser on the upper floor. It made an attractively different installation. The entire design was worked out by the Popky firm and "sold" to the tavern owner.

Another recent installation was a "marine bar." This was designed with set-in fish tanks around the bar and throughout the room. The tanks were lighted, giving a real aquarium effect to the room. Again the idea was born and grew in the Popky organization.

Big point in getting these and other jobs, according to Harry Popky, is the firm's policy of taking the contract for the entire job, including the design and building of all equipment, in addition to the beer dispensing and cooling units.

"It's a case of too many contractors spoiling the sale," Mr. Popky pointed out. "When we take a job we take the entire contract—backbar, storefront, even additions to buildings. We fill the customer's needs all along the line. Removing the prospect's multiple worries, we get the contract."

Not all of the firm's installations

are in the "fancy" class. Two installations this year have been made in slaughter houses. One of these firms was sold equipment to chill and store 10,000 lbs. of beef daily. The other job called for the building of an additional chill room. The Popky firm not only took the contract for the refrigeration equipment, but also for the building of the room. Careful attention to details and awarding of sub-contracts returns an additional profit on building and remodeling jobs, Mr. Popky revealed. "Also," he says, "in doing our own building we can build or remodel to the exact specifications needed for the refrigeration equipment, thus giving better satisfaction all around."

"What we bank on is foot-work," declares Salesman Louis Raker of the firm. "When we get a prospect interested, we buttonhole him and take him around to see jobs we have installed. This presentation, plus the testimony of users, pays dividends in time and money. (Salesmen are said to be averaging \$200 to \$1,000 a month.)

One of the firm's big items is a pre-fabricated pre-cooler of its own design and manufacture. Sales on these units are averaging one a day and one is shipped out daily for

distribution to dealers. The firm is going into quantity production on the pre-cooler and a new-type, direct-draw beer system, and has organized the Air-Flow Mfg. Co.

## Georgia Power 7-Month Commercial Sales \$105,306

ATLANTA — Sales of commercial refrigeration equipment by Georgia Power Co. commercial division amounted to \$105,306.40 in the first seven months of this year, more than one-third of all types of commercial sales, which totaled \$232,087.81 during the period.

## Department Store Uses Cooled Candy Display

DALLAS, Tex.—Electrically refrigerated candy cases are now used for display in the foods department of Sanger Bros., Dallas department store. Candy display temperatures are held at 60° F. Equipment was installed by Joe Hoppe, Inc., Frigid-air distributor.

"Controls Refrigerant to Within a Couple of Ounces"  
"Have Reduced Our Service Calls"  
"Works Well on Multiple Systems"  
"We Like Its Easy Adjustability"  
"Have Used Them with Constant Success"

# Thanks for the Compliments



## Fedders CONSTANT PRESSURE VALVES

● These enthusiastic comments by refrigeration men are typical expressions of the satisfaction and performance they are enjoying with Fedders Constant Pressure Valves which have opened up new valve and refrigeration applications.

Sensitive, accurate adjustment... close control of refrigerant pressure within a few ounces... low pressure drop... ease of installation on single and multiple systems... convenient shut-off valve for attaching gauge... reduction of service calls, —those are some of their important and profitable advantages.

### Built in Two Sizes

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**MODEL MCP-38** High Capacity Constant Pressure Valve for large commercial and air conditioning installations has a range of capacities from 12,000 BTU's with pressure drop of .8 lb. to 60,000 BTU's with pressure drop of 26.7 lbs.

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## Store Plans Overhaul Of Cooling System

DALLAS, Tex.—Complete rehabilitation of its air conditioning plant, one of the first installed in Texas, will be included in the \$500,000 expansion program announced by the management of Neiman-Marcus Co., Dallas department and apparel store. Sun bath facilities for employees, located atop the building, will be one of the features of the improvement.



A simple, efficient tool for hard pulling jobs such as flywheels, fans and pulleys—universal for all make refrigerators. Rotating arms grip in any position—internal or external pulley—odd and even spoked wheels. Hex head power screw has narrow band to facilitate hand turning. Made of special steel, hardened and tempered. Fully guaranteed. Sold by mill supply and refrigeration jobbers.

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## Question of the Week

Answered By

F. O. JORDAN, Registered Consulting Engineer, State of Michigan

### How To Figure Savings Made Possible Through Evaporative Condensers

SPRINGFIELD, OHIO

"Dear Sir:

"I have been considering the possibilities of selling evaporative-cooled condensers in this vicinity. Both air and water temperatures are rather high in this part of Ohio in the summer time, so that the operating cost of air cooled and water-cooled condensers is rather high.

"While I know that there should be a good saving in the operating cost of refrigerating equipment when evaporative condensers are used, I don't have much of an idea what the saving would be. Do you have any information on this?

"I would also like to have some idea regarding the cost of servicing evaporative-cooled condensers, as I am liable to be asked that question."

G. C. B.

Answer: As compared to the air-cooled condenser, the evaporative-cooled condenser effects a great saving in compressor power consumption, because "Freon-12" head pressures commonly used with the evaporative-cooled unit are around 125 pounds as compared to around

170 pounds head pressure generally conventional in air-cooled condenser service in summer.

The principal reasons for the lower head pressure with the evaporative-cooled unit are that its performance depends upon wet-bulb temperatures of the air, which are much lower than the dry-bulb temperature of the air upon which the performance of the air-cooled condenser depends, and that the heat transfer resulting from the evaporative cooling effect is greatly increased.

Head pressures possible with the evaporative-cooled condenser are lower than those with the water-cooled unit if water temperatures are quite high, as they frequently are in summer in some sections of the country. Therefore, the operating costs of the evaporative-cooled refrigeration installation may be lower than the operating cost of the water-cooled job, even if only electric power is considered. Of course, the big saving of the evaporative-cooled condenser as compared to the water-cooled condenser is the saving in the water bill.

To get at the saving in power consumption as compared to the air-cooled job, the best way is to note the difference in the power required per ton of refrigerating effect with the compressor operating at around 170 pounds head pressure ("Freon-12") as may occur with the air-cooled job and the power required with the compressor operating at around 125 pounds which may be considered usual with the evaporative-cooled job. Performance data on the power requirements of compressors may be obtained from the respective manufacturers.

Since the evaporative-cooled condenser uses only 5 or 10% as much water as the water-cooled condenser, the saving in the water bill may be assumed to be around 90 or 95%. The saving in overall operating cost of the evaporative-cooled installation as compared with the water-cooled job may be read approximately from the table in the next column.

### Hints on Maintenance

Following are some hints regard-

ing the work required seasonally to keep the equipment in good operative condition:

1. Eliminator plates should be kept free from dirt or scale accumulations, and surfaces should be painted as necessary to prevent corrosion.
2. Spray nozzles must be kept clean and free from obstructions.
3. The water tank must be kept clean and should be painted when necessary to prevent corrosion. Strainers and water supply lines should be kept clean and free from obstructions. The head-pressure control valve must be kept in proper adjustment. The make-up water valve should be inspected regularly and adjusted and cleaned when necessary.
4. The condenser surfaces must be kept clean and free from scale deposits. Hard incrustations of scale

### Saving in Dollars Per Installed Ton Per Season of Evaporative Condenser Over Water-Cooled Condenser Wasting Water to Sewer at 95° F.

Initial Temp. City	Power Water to Per Condenser Kwh.	Cost of Purchased Water Per Thousand Cubic Feet \$0.75	\$1.50	\$2.25
70°	2½	\$ 7.08	\$11.56	\$16.04
70°	4½	9.68	14.15	18.64
80°	2½	10.14	17.68	25.22
80°	4½	12.74	20.28	27.82
88°	2½	18.83	35.06	51.29
88°	4½	21.43	37.66	53.89

generally may be removed by alternately raising and lowering the condenser temperature by starting and stopping the fan until the repeated contraction and expansion have cracked the scale. After this, the scale may be removed by brushing and washing.

5. Check the amount of refrigerant in the system periodically.

6. Check for presence of air in refrigerant system by allowing the equipment to remain inoperative for a few hours and checking to determine if the condenser pressure is at the saturation pressure for the refrigerant temperature corresponding to adjacent air temperature. If the pressure is more than 2 pounds above saturation pressure, the air should be removed by purging the receiver.

7. All bearings should be lubricated regularly. All belts should be adjusted properly. Alignment and adjustment of linkages should be checked.

8. Electrical equipment including starter controls, fuses, overload and no-voltage protecting devices, solenoid valves, etc., should be checked periodically and kept in proper operating condition.

9. The water tank should be drained in freezing weather to prevent formation of ice.

10. If condensing pressure is too high, check and remedy the following:

- (a) Check for excessive air in the system.
- (b) See if the air circulating fan is running in the proper direction.
- (c) See if the pump is running in the proper direction.
- (d) See that the proper water level is maintained in the tank.
- (e) See if the pump suction is cleaned and that all nozzles are functioning properly.
- (f) Check by means of an anemometer or a similar instrument to see that the proper amount of air is being circulated over the coils.
- (g) See that the dampers are properly set.

(h) Be sure that there is not an overcharge of refrigerant.

11. Condensing pressure too low.

(a) Make sure that there is sufficient refrigerant charge.

(b) If the weather is very cold, partially close the damper in the air intake.

12. If the operation is noisy, check and remedy the following:

(a) See if fan blades are striking the scroll, or if some object has fallen into the fan housing.

(b) See that the fan is properly centered on the shaft and that it is securely keyed to it.

(c) Examine fan bearings and renew if burned out.

## Hugh Jones of Knoxville Killed In Auto Accident

MILWAUKEE—Hugh Jones, formerly assistant manager of the appliance department of Sterchi Bros., Knoxville, Tenn., was killed Aug. 11 when the car he was driving struck a tree at a highway intersection 15 miles east of Milwaukee. He was 27 years old.

Mr. Jones was in the appliance business in Knoxville for eight years, and before becoming assistant manager of the Sterchi appliance department had been a salesman for East Tennessee Electric Co. He left Sterchi Bros. July 1 to go with Ault-Wilborg Co., a division of International Ink Corp., and at the time of his death was manager of the Milwaukee territory for that concern.

Well known in Knoxville business circles, Mr. Jones was an active golfer and bowler and was a member of Holston Hills Country Club.

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### 2. Snap Action Valve

Provides different temperatures on multiplexed installations with positive defrosting of finned evaporators.

### 3. Liquid Temperature Valve

Minimum low back pressure adjustment in direct expansion instantaneous beverage coolers.

### 4. Evaporator Regulating Valve

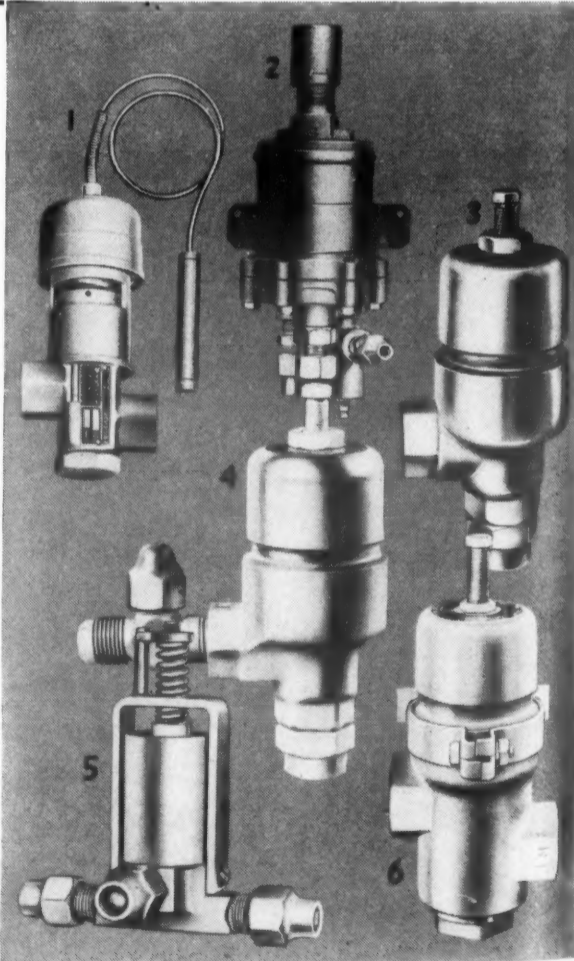
To prevent frosting of multiple forced air evaporators. Permits temperature difference in fixtures.

### 5. Automatic Regulating Valve

To control water bath temperatures used in soda fountain applications when multiplexing. Can also be used in commercial applications.

### 6. Crankcase Regulating Valve

Prevents high back pressure. During long off period, valve closes tightly to prevent excess pressure in crankcase; protects stuffing box seal and prevents absorption of refrigerant in crankcase oil.



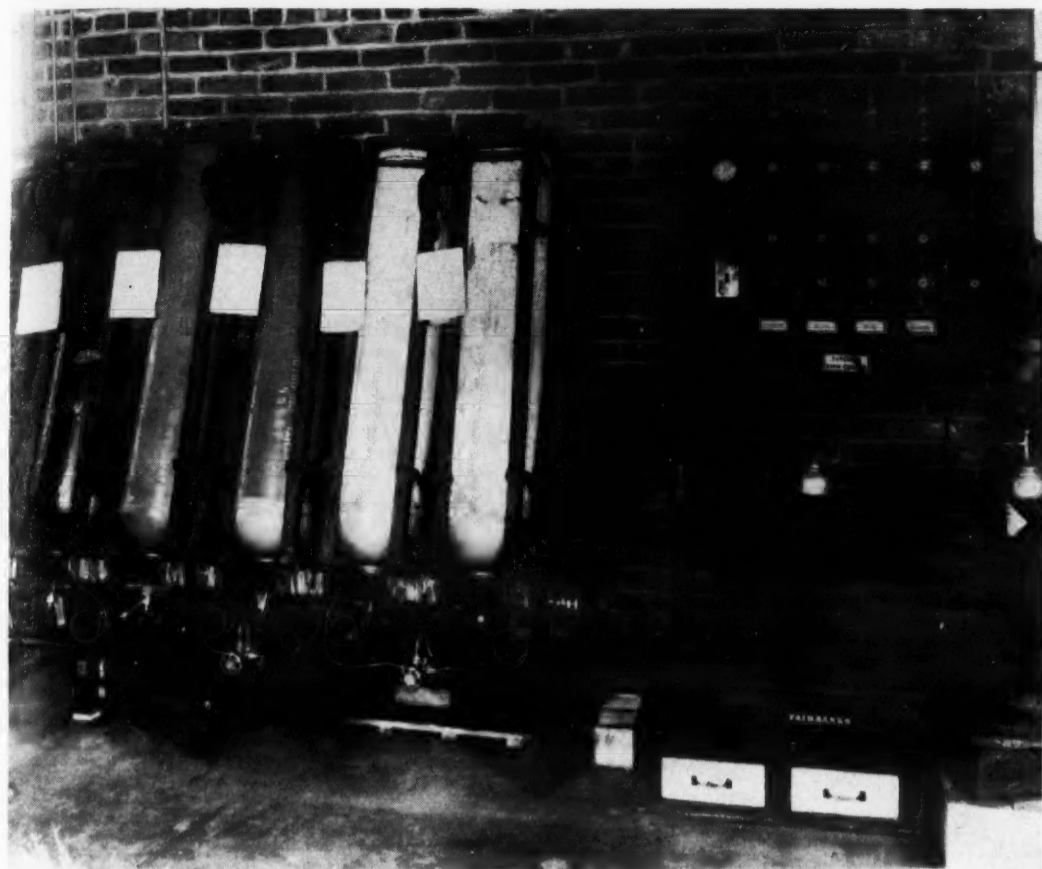
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## Making Light and Fast Work of Refrigerant Transfer



This "double action" charging rack enables Brass & Copper Sales Co., St. Louis jobber, to pump out and charge two refrigerant cylinders at the same time. Each refrigerant to be transferred has its own instantaneous liquid cooler, and each refrigerant circuit has its own strainer and liquid indicator. Angle iron frames holding large storage cylinders are hinged for greater handling speed.

## Two Cylinders Charged At Same Time on Charging Rack With Dual Liquid Cooler

ST. LOUIS—Use of a "Superior Rapid Charger" so installed as to make possible the pumping out and charging of two refrigerant cylinders at the same time has greatly simplified and speeded up the refrigerant transfer work of Brass & Copper Sales Co., parts and supply jobber here.

This system uses the intermediate cooling principle. Each refrigerant to be transferred has its individual instantaneous liquid cooler, connected in series with a refrigerating circuit using a thermostatic expansion valve as the refrigerant control and a 1/4-hp. Par Model SA-2-S condensing unit.

Refrigerant temperature is controlled by a White-Rodgers pressure control on the condensing unit. The instantaneous coolers are, of course, located in a heavily insulated compartment.

Each refrigerant circuit has its own strainer and liquid indicator. Flexible hose and Superior "Quick-Couplers" are used. The Quick-Couplers eliminate the use of wrenches in fastening the flexible line to the service man's cylinder, thereby increasing the speed of transfer.

### Dallas Jobber Shows Uses of Silica Gel

DALLAS, Tex.—Refrigeration Supply Co., refrigeration and air conditioning parts jobbing company headed by U. C. Boyles, recently conducted a demonstration of the uses of silica gel. The demonstration was conducted by Page Edmunds, representative of Davison Chemical Co.

**From 1/4 to 25 TONS of refrigeration**

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## Milton Named Asst. Mgr. Of G-E's Plastics Dept.

PITTSFIELD, Mass.—W. H. Milton, Jr., who has been sales manager for the General Electric plastics department here for the past two years, has been appointed assistant manager, responsible to G. H. Shill, manager, for all phases of the department's activities.

Mr. Milton has been associated with General Electric since 1920, when he became a member of the company's student engineering course at Schenectady. He joined the industrial department in 1922. In 1925 he went to the company's Philadelphia office as a mining specialist, and in 1933 was assigned to follow the chemical and rayon industry in that area. He became manager of the sales department of the General Electric plastics department in 1938.

## Servicemen Questioned!

### Trade Service Information For Prizes At Jobber's Meeting

OKLAHOMA CITY, Okla.—A quiz session on refrigeration servicing was one of the features of the meeting held recently by Macklanburg Brass & Copper Products, Inc., local parts jobber, for 63 dealers and service men from Oklahoma City and surrounding towns.

Cities represented in the attendance included Enid, Shawnee, Guthrie, Ardmore, Lawton, Edmond, Perry, Ponca City, Norman, Chickasha, and Seminole.

The quiz was conducted by A. R. Morin of the jobbing firm, who

reported that the service men all seemed anxious to compete. C. S. McPherrin of Guthrie won first prize. Four other prizes also were awarded.

Page Edmunds of Davison Chemical Corp. conducted the same demonstration at this meeting that his company sponsored at the All-Industry Show in Chicago last January.

Ray Polley of Ansul Chemical Co. and Charles Anderson of Imperial Brass Mfg. Co. gave brief talks on the products of their respective companies.



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4. PANS HAVE 1" INSULATION COMPLETELY SHEATHED IN ALUMINUM.
5. ENDS FINISHED—NO RAW EDGES.
6. Specially treated paper strips between top and bottom of pan.
7. Paraffin dipped wood spacers prevent cold conduction.

Bush Circulator Coils are made for standard size walk-in coolers, or are custom made to your particular specifications. And remember—all Bush surface figures are for ACTUAL EXPOSED AREAS. No necessity to include safety factor when figuring Bush surfaces.

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## How To Keep Employees Happy



Employee relations can be improved by the installation of air conditioning in dining rooms, recreation and rest rooms, thereby suggesting a new market for packaged equipment. The Curtis 5-ton unit shown here is installed in a typical factory employee's dining room.

### Air Conditioning Systems Completed In Illinois and Florida

CHICAGO—A \$200,000 air conditioning system serving the first five floors of the Conway Building, at Clark and Washington Sts., has recently been completed by Kroeschell Engineering Co. The five units, designed by Kroeschell, will air condition 100,000 square feet of space.

CLEWISTON, Fla.—Westinghouse air conditioning equipment has been installed in the new office building of the United States Sugar Co. here. The Tampa Armature Works, Westinghouse air conditioning distributor, made the installation. J. Arthur Turner is president of the company.

## W. H. Barnett Heads Airtemp Department

DAYTON, Ohio—Ward H. Barnett has been appointed merchandising manager of Airtemp air conditioning and heating sales, announces D. W. Russell, president.

Mr. Barnett first came to Chrysler Corp. with the purchase of Dodge Bros. in 1928. Following sales and promotional assignments in various divisions of the corporation, he was made a sales director of the Plymouth division in 1939, where he served until transferred to his present position.

### Filter Company Elects Slidell President

MADISON, Wis.—Kemper Slidell, former vice president of the Research Products Corp. here, has been elected president, succeeding the late Howard F. Weiss. Allen Abrams, Wausau, has been elected a director of the firm, which manufactures air filters and water treating materials.

### 'Cooler' Is Cooler When Jail Gets Conditioning

BLYTHE, Calif.—It'll really be cooler in this city's "cooler" from now on. An air conditioning system has been installed in the city jail.

## Cooling Honored In St. Louis



Forty St. Louis civic leaders, including Hon. Bernard Dickmann, mayor, were present when the Stix-Baer-Fuller department store air conditioning was recently placed in service. Built at a cost of approximately \$350,000, the system incorporates two York motor driven 563-ton centrifugal compressors used for cooling water.

## Co-Operative Room Cooler Display Draws Home and Office Prospects

ST. LOUIS—Prospects for residential cooling equipment are flocking to one of the largest cooperative displays of room coolers and attic fans ever staged in this area, held during July and August on the first floor of the Union Electric Co. building here. Over 100 dealers and a number of distributors have tied in with the campaign.

The "show" was announced by a half-page newspaper advertisement, and participating dealers are following it up with direct-mail and spot radio announcements. It is sponsored by the St. Louis Electrical Board of Trade.

Room coolers on display include Carrier, Westinghouse, Frigidaire, York, General Electric, Fairbanks-Morse, and Airtemp. Each unit is tagged with the name of the local distributor and dealers.

In the attic fan section are models of the Hunter-Century Zephyr, Breez-Air Attic Fans, Emerson Electric models, and a model house demonstrating the action of these systems.

Distributors taking part in the

exhibit are Mayflower Sales Co., Fairbanks-Morse, Artophone Corp., Frigidaire, Sears & Piou, and Westinghouse Electric Supply Co.

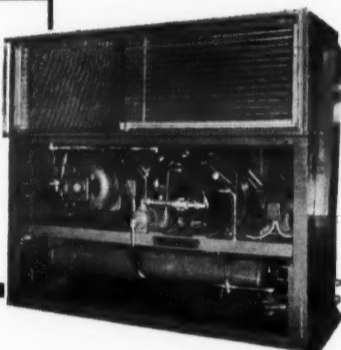
Airtemp dealers include Famous-Barr; Bigalthe Electric Co.; East Side Sales & Service Co. of East St. Louis, Ill.; C. J. Moritz Heating Co.; and Phil's Air Conditioning Co.

General Electric dealers are Aeolian Co.; Albers Radio Co.; Central Hardware Co.; Continental Auto Supply; the Corrigan Co.; General Radio Co.; Midvale Supply Co.; Fred A. Schmidt Appliance Co.; Schweig-Engle Service Co.; and Scruggs-Vandervoort-Barney.

Frigidaire dealers cooperating are Frigid Refrigeration Service; Drete Electric; Kroemke, Inc.; Mack Electric Co.; North Side Refrigeration Co.; South Side Refrigeration Co.; H. S. Woodward Co.; South Side Radio & Service, Inc.; F. A. Schmidt Electrical Appliance Co.; H. J. Sohm; and C. E. Wildberger Co.

Carrier dealers are Kendrick Electric; Niehaus Sales Co.; Droge Auto Sales; and Schaub Hardware Co.

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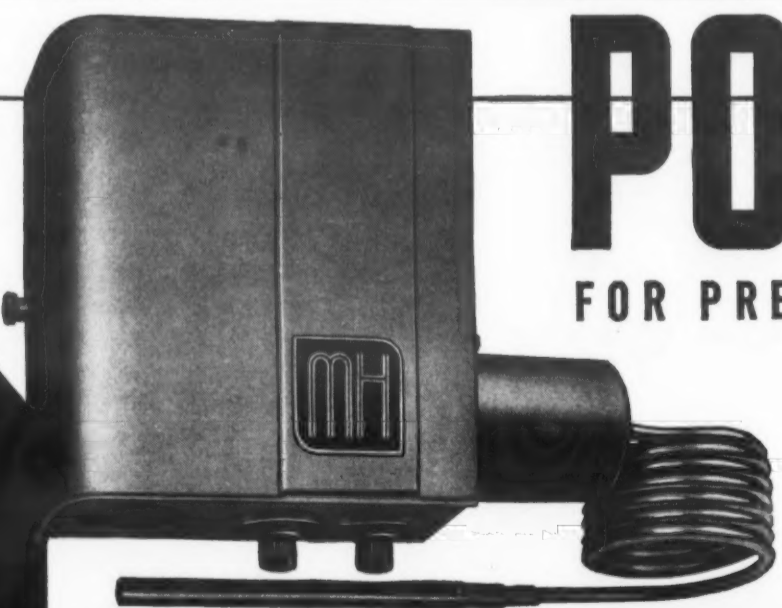
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## Processing Charges, Not Locker Rentals, Are Key To Plant's Profit Possibilities

*Editor's Note:* This article is a condensation of a paper prepared by Neal Banter, sales manager of Lindley Box & Paper Co., Marion, Ind., and presented by him at meetings of locker plant owners and operators in various parts of the country.

**P**OUNDAGE turnover of produce in each individual locker, rather than the actual number of lockers rented, plays the most important role in determining the amount of profit made by the average locker plant.

Necessarily, all lockers must be rented before a maximum turnover is possible. But the real opportunity for money making lies in the service charges for processing and freezing, not in the locker rentals themselves. And the only way to build up this profit possibility and at the same time to save the customer money through reduced storage cost per unit is to encourage use of the lockers on a real volume basis.

For example, consider the case of five "typical" customers. Customer A stores only 100 lbs. of food in his locker during the course of a year. Customer B puts 250 lbs. through his locker in a year's time; Customer C, 500; Customer D, 750; and Customer E—the "ideal" type—1,000 lbs.

Arbitrarily setting the locker rental fee at \$10 per year and processing charges at 2½ cents per pound or quart (an extremely conservative average), Customer A not only pays an excessive storage charge per pound but is also a liability to the plant operator's opportunity for income. He will bring a gross income of \$10 for rental and \$2.50 for freezing and processing—a total of only \$12.50 per year.

### 'EXPENSIVE' CUSTOMERS

So, despite the fact that Customer A may well be a most outstanding citizen—a doctor, a banker, or a merchant—who looks upon his locker as a hobby or as a means of preserving a fine buck, a good catch of fish, or a few pheasants, he is an expensive type of customer for the locker plant operator to handle.

Customer B, who stores 250 lbs., pays the same \$10 rental as Customer A, but in addition he pays \$6.25 for processing, thus yielding a gross yearly income of \$16.25.

Customer C stores 500 lbs. and gives a yield of \$10 in rental and \$12.50 in processing charges for a gross total of \$22.50 per year.

Customer D, with 750 lbs. of produce going through his locker annually, pays \$10 plus \$18.75 for a total of \$28.75.

Customer E, the type of customer which the locker plant operator should continually strive to develop, is the 1,000 lb. or quart patron who, although paying the same \$10 rental fee as the others, pays \$25—or 2½ times his rental costs—for processing charges. This makes a total income of \$35 a year from this patron, compared to the \$12.50 income from Customer A.

A 300-locker plant, on the above basis, would have an annual gross income of \$3,750 a year if all customers fitted into the Type A category. The same plant filled with Type B customers, however, would gross \$4,950 annually; with Type C, \$6,750; with Type D, \$8,625; and with Type E, \$10,500.

### DO YOU WANT \$6,750?

Difference in plant gross when filled with Type A and Type E customers, then, is \$6,750—a tidy sum and one well worth working for.

On a percentage basis this gain looks just as good. In developing turnover to secure 250 average yearly locker pounds instead of 100, gross income is increased 32%. When average poundage becomes 500 lbs., income is increased 80%. Reaching the 750-lb. basis ups the gross 130%, while attaining the 1,000-lb. goal yields 180% extra income increase.

Best way to set about raising the individual locker poundage turnover in a plant is to convince the patrons of the economies in storage charges that they can effect by using their lockers more consistently, thus increasing the amount of produce stored.

Again on the basis of a \$10 yearly rental fee, Customer A, who stores only 100 lbs., pays 10 cents per pound

or quart storage cost. If by helpful suggestion the plant operator can raise this customer to the Type B classification, the patron's rental cost is cut to only 4 cents a pound. Five-hundred pound patrons pay only 2 cents per pound rental, and at 1,000 lbs. the rental rate drops to only 1 cent per pound—just one-tenth the rate paid by Customer A.

So by encouraging his customers to increase their locker usage, the plant operator is helping them benefit from rental savings while helping himself benefit from processing profits.

### VARIETY BUILDS VOLUME

One way to get the customer to increase the turnover in his locker is to urge the storage of a variety of foods. Under normal circumstances, the wider the variety of food stored, the larger the weekly withdrawals will be. Continual suggestion by the plant operator of seasonal delicacies suited to freezing and storage will help in this respect.

Another way to stimulate this increase is to economize on space by boning meats and cutting fowl or other items of awkward shape so that they may be packed more economically.

The type of storage container or package also has a great bearing on the problem of increasing poundage turnover. For instance, a standard size steel locker measuring 30 x 20 x 17 inches will hold approximately 70 glass quart jars. This same locker will hold 129 rectangular quart packages or cartons of a 5¼ x 5¼ x 2¼-inch size. In other words, 84% more quarts can be stored in such rectangular cartons than in the glass jars.

### CONSIDER THE CONTAINER

Thus it can be seen that round or cylindrical containers are too wasteful of space to be tolerated if the plant operator wishes to secure greater turnover, lower his customer's storage costs, and increase his own profits. Cup-shaped containers are even more wasteful.

On a \$10 annual rental basis again, round glass quart jars take up 14.2 cents worth of locker space per quart per year, while rectangular packages of corresponding size occupy only 7.7 cents worth of space per quart per year.

Processing charges are an important factor in these calculations, too, for a locker filled with 70 glass quart jars at a 2-cent-per-quart freezing and processing rate would yield a gross of \$1.40. The same locker filled with 129 quart-sized rectangular packages or cartons would yield \$2.58, or 84% more than the jars.

To secure best results in a merchandising and volume turnover program, it is necessary for the locker operator to plan a series of mailing pieces, to stimulate cooperative or group buying of certain types of produce, and to give patrons timely suggestions and assistance as to the "what, when, and how" of freezing and storing their food supplies.

## Tex. Plant Offers Special Service For Sportsmen

SAN ANGELO, Tex.—A special locker service for hunters and fishermen, providing for processing and storage of fish and game, is being offered by the San Angelo Frozen Foods Locker Plant under direction of E. A. Schonrock, manager.

This service is being advertised chiefly by use of printed placards placed in establishments where sportsmen gather.

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## Canada, Brazil, South Africa Best Buyers Of Refrigeration Equipment in June

Country	Household Refrigerators No.	Household Refrigerators Value	Commercial Refrigerators No.	Commercial Refrigerators Value	Refrigerator Parts Value	Air Conditioners and Parts Value
Canada	2,244	\$147,161	292	\$33,891	\$220,938	\$3,911
Brazil	1,401	\$119,566	131	\$4,872	21,077	...
South Africa	1,465	\$117,436	43	\$4,428	32,775	...
Venezuela	621	\$58,289	96	\$12,435	...	...
Cuba	579	\$47,882	158	\$14,582	11,668	...
Mexico	503	\$46,254	35	\$5,454	9,250	2,900
Colombia	...	...	19	\$4,445	...	1,132
New Zealand	...	...	31	\$4,017	4,534	...
Argentina	427	\$18,921	...	...	103,218	...
United Kingdom	...	...	91	\$11,453	21,557	...
British India	378	\$28,971	...	...	4,078	12,399
British Malaya	452	\$39,827	...	...	3,781	8,240
Hong Kong	...	...	...	...	6,933	4,064
Chile	...	...	...	...	4,460	...
Uruguay	...	...	...	...	5,180	...
Burma	...	...	58	\$9,873	...	...
Panama, C. Z.	...	...	49	\$6,052	...	...
Panama, Republic of	...	...	...	...	...	...
U. S. Possessions:	...	...	...	...	...	...
Hawaii	894	\$79,550	174	\$21,844	4,766	...
Puerto Rico	483	\$42,470	68	\$16,906	6,578	3,498

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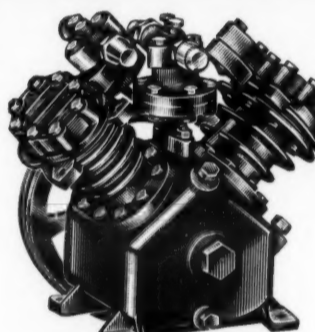
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SERVEL MODEL J  
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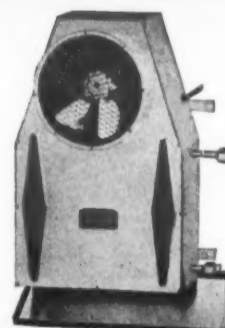
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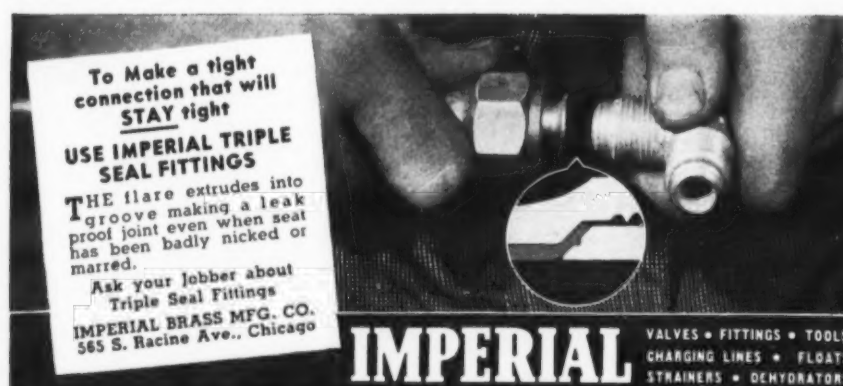
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## Household Exports Up In Value In June

WASHINGTON, D. C.—Exports of household electric refrigerators during June totaled 10,508 units, a slight decline from the 10,694 reported for May, but dollar volume of foreign shipments was up to \$848,263, compared with \$815,458 in the preceding month, according to statistics compiled by the Bureau of Foreign and Domestic Commerce.

Foreign sales of commercial refrigeration equipment declined in value from \$150,336 in May to \$133,969 in June, and parts for electric refrigerators dropped from \$531,228 in May to \$490,172 in June.

Canada continued to pace the "best foreign customers" list for the month, household shipments to that country totaling 2,244 units valued at \$147,161; commercial units 292 valued at \$33,891; and refrigerator parts \$220,938.

Second best household customer was Brazil, with 1,401 units valued at \$119,566; third was South Africa, with 1,465 units valued at \$117,436. Others high on the month's export list were Venezuela, \$58,289; Cuba, \$47,882; and Mexico, \$46,254. Hawaii led U. S. possessions with 894 units valued at \$79,550.

Next to Canada in the commercial classification were Cuba, with \$14,582; Venezuela, \$12,435; United Kingdom, \$11,453; and Panama Canal Zone, \$9,873. High-ranking refrigerator parts customers were Argentina, \$103,218; South Africa, \$32,775; United Kingdom, \$21,557; and Cuba, \$11,668.

In purchases of American air conditioners and parts, British India and British Malaya were one-two, with \$12,390 and \$8,240, respectively.

## New GECC Time Plan For Apparatus Items

NEW YORK CITY—A new time payment plan has been made available by General Electric Contracts Corp. to customers of agents, distributors, and dealers handling G-E apparatus products.

Primarily designed for such items as motors, capacitors, transformers, arc welders, etc., the plan is designed to assist G-E outlets handling these products in reaching purchasers who are not in a position to make immediate outlay of cash for new equipment for modernization and expansion.

The plan is available through all offices and representatives of GECC, and is adaptable to individual requirements. It does not apply to household appliances, similar plans for such products having been in effect for a number of years.

## 208 G-E Units For New Baltimore Apartments

BALTIMORE—Two hundred and eight General Electric 4-cu. ft. electric refrigerators will be installed in the new apartment-house addition to the Northwood development on Loch Raven Blvd. here. The addition will be constructed at an estimated cost of \$500,000.

The original group of apartments in the Northwood development, consisting of 368 units, was constructed more than a year ago, and was equipped with 4-cu. ft. Westinghouse refrigerators.

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REPLIES to advertisements with Box No. should be addressed to Air Conditioning & Refrigeration News, 5229 Cass Ave., Detroit, Mich.

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SEND FOR PRICES and literature on the General 1940 all streamlined refrigerator display case line. Over 40 years experience manufacturing good commercial refrigerators. On a comparative price test with other makes of equal specifications, prices are lowest in the country. GENERAL REFRIGERATOR & STORE FIXTURE CO., 5th & Bainbridge Sts., Philadelphia, Pa.

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### INFORMATION WANTED

WANTED: Address of Albert Barron, refrigeration mechanic formerly of 230 Forty-ninth St., Brooklyn, N. Y.—MADISON FLORAL CO., 330 Fifth Ave., N.Y.C.

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## Steps In the Freezing of Ice Cream In Counter-Type Freezers (Continued)

By Arch Black and Dean C. Seitz

**Editor's Note:** This instalment in the series of articles on the servicing of counter-type ice cream freezers concludes the section which describes the steps in the operation of the counter freezer. It is important for the service engineer to understand the operation of the counter freezer thoroughly, as some of the faults in the operation of the system may come in parts of the equipment other than the refrigeration unit.

Articles in the near future will discuss service complaints on counter-type ice cream freezers.

**Step 6—Whipping Period.** After the refrigeration is turned off (Step 5) the mix is in a condition

which will retain the air that is beaten into it and while there is some air incorporated during the freezing time, the greatest percentage is after the refrigeration has been turned off. The whipping permits globules of air to form in the cream. It expands in volume in a similar manner to whipping cream when the housewife whips it with a hand or electric whipper. This expansion is known as overrun or swell, and is based on percentages, details of which were covered under "How To Determine Overrun" in the July 17 issue.

A mix must be well balanced to give good whipping qualities and on an average the whipping period requires 3 to 4 minutes to reach 100% overrun. If it requires much longer than this the supplier of the mix should be consulted.

During the whipping period, tests should be made at intervals until the desired weight is obtained, the procedure being as described under "How To Determine Overrun." Be sure when making these tests that the cup is level-full. Puncture the mix in the cup after filling to eliminate air-pockets with the spatula and level off. These checks should be made correctly and quickly and any samples drawn should be returned to freezer.

By opening filler hole and checking when ice cream swells so that it appears at top of filler hole indicates overrun reached and time to draw off.

**Step 7.** After the mix has attained the desired overrun, open draw-off gate and start to fill cans or cartons immediately.

**Step 8—Draw-off.** With beater running draw off the ice cream into 5 or 2½ gallon cans or directly into packages and immediately placing same into hardening cabinet. When freezer is emptied, cream flow stops, turn off agitator switch.

### No. 3—Hardening Ice Cream

As soon as possible, after drawing the ice cream from the freezer, place it in the hardening cabinet. The hardening time is dependent upon the temperature of brine or refrigerant, and the condition of the ice cream when placed in the cabinet.

In general, however, it may be estimated that ice cream in cups requires about two hours, smaller packages—pint and quart cartons—harden in four to six hours while that in 5-gallon cans takes twelve to twenty hours. It should be remembered that some factors which influence the running time in the freezer also influence the hardening time. The freezing, however, lowers the temperature fifty to sixty times as fast as the hardening cabinet. For each minute that the cream is drawn too soon from the freezer this will mean about an extra hour in the hardening cabinet. Don't, however, freeze too stiff.

**Subsequent Batches:** As mentioned under Step 5, the refrigeration period is usually six to nine minutes and during this time the efficient operator will prepare the batches to follow and when refrigeration valve is closed he will prepare the containers for the batch which is then being frozen, lining them up on a nearby table.

With such a procedure, the following batch already prepared, it can be immediately poured into the freezer without stopping the agitator (Step 8) and again turning on the refrigeration (Step 3). Never open the refrigeration valve without the agitator being in motion under any circumstances. The remainder of the procedure is as already outlined.

### Special Notes on Drawing-Off

Drawing off the ice cream from the freezer should be done as quickly as possible, and to expedite this operation the operator should have lined up conveniently by the freezer head, the various sized containers as required.

Usually it is advisable to have these at the left side of the freezer, and the lids at the right. Thereby an operator can pick up the container and hold it under the draw-off opening with his left hand and

Fig. 5—The Draw-Off



Drawing off ice cream into packages. There is considerable special care to be taken in the drawoff process, and the authors tell about it in this instalment.

operate the draw-off gate and pick up the lid and place it on the container with his right.

Unless packages are quickly covered and immediately placed in hardening cabinets, there is a possibility that the quality of the ice cream will be impaired.

During the drawing off period a check on the weight of the filled container should be occasionally made. If it is found that there is a tendency of the ice cream to become too light, open the refrigeration valve slightly, never full, for a few seconds at a time.

By opening the valve for more than a few seconds at a time, the ice cream may become too stiff, lose overrun and perhaps damage the freezer. If necessary, open the refrigeration valve again later for a few seconds until the proper weight is regained, then be sure that the valve is closed again.

Very often there are quick whipping mixes that have a tendency of becoming too light during the draw-off period and in this event, turn on refrigeration to retard overrun as mentioned above.

Never turn on the refrigeration unless there is approximately half the batch in the freezer. If it is found near the end of the draw-off period that the cream is too soft, it is advisable to leave it in the freezer and add less mix for the next batch. Speeding up the drawing off will prevent a recurrence of such a condition. If not the mix supplier should be consulted.

**Filling Cups:** On 2½ gallon freezer, it is possible to fill an entire batch into cups and packages, pints, and quarts, if the operation is accomplished quickly without much variation in weight. When cups only are to be considered or on 5-gallon freezers, however, it is a good policy to draw off into a 5-gallon can. It should then be placed in a dispensing cabinet and with the use of a dipper fill the cups. Proceeding in this manner, a more even overrun and consistency is maintained in each cup.

One important point to remember is that the time required to draw off into a large number of small packages means that it may be long enough to permit the ice cream in the freezer to expand more than 100% overrun, and also result in a loss of consistency towards the end of the draws and finally a coarse finished product.

Previously it has been pointed out in Step 6 (freezer operation) that the greatest amount of air is incorporated during the whipping period. An operator should bear this in mind and remember during "Step 8" the beater is still running while drawing off.

It is for this reason that it is usually recommended that if packages must be filled, only quart and pint packages be filled directly.

To eliminate air pockets from forming in packaged ice cream, it is recommended that each package be given a slight jar during the filling procedure.

Place the filled cans and packages as quickly as possible into the hardening cabinet, particularly so during the summer or in high room temperatures. The longer these are left standing in room temperature, the greater the chances are for a thin film of cream to melt around the can or carton edge. When this happens the film will re-harden slowly when the container is finally placed in the hardening cabinet. The result is that there is "icy" ice cream or a film of coarse textured ice cream around the container.

Filled cans or packages should be

placed in the hardening cabinet so arranged to provide for free air circulation around them whenever possible, and in such a manner that all available contact surface is used. Round style cartons should be capped and placed in hardening cabinet bottom up, thus forming a neat surface when the carton is opened.

After the day's run the freezer should be thoroughly washed and sterilized.



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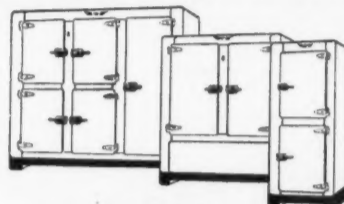
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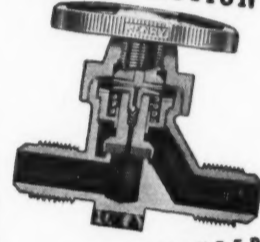
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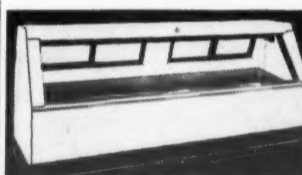
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TYLER full line dealers and distributors are setting new records for sales and profits. Tyler's big line enables you to completely outfit modern food stores and open up hundreds of live prospects in other fields. Famous Welded Steel construction. Phenomenal values. Display cases . . . Reach-Ins . . . Walk-Ins . . . Vegetable Displays . . . and special type refrigerators to fit all needs. Every one a super value. Write for details.

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REACH-IN BOXES—40% greater capacity.

TYLER Refrigerators  
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Sold Only Through Dealers Will Add to Your Income Quickly, Easily  
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EFFICIENCY GOES UP  
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**ROTARY SEAL Replacement Units**  
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FOR SATISFACTION—SPECIFY...  
**"VIRGINIA" REFRIGERANTS**  
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Located at tidewater  
WEST NORFOLK, VIRGINIA

**Anaconda Copper Refrigeration Tubes**  
Unusually long lengths!  
**THE AMERICAN BRASS CO.**  
FRENCH SMALL TUBE BRANCH  
General Offices: Waterbury, Conn.

## Tailored Trade-In Plans Help Portland Dealers Stay on 'Profit Side' of Deals

(Continued from Page 1, Column 4)  
Portland's schedule is devoted to electric, gas, wood, and coal ranges, classifying and evaluating them both by types and by ages. All allowances are contingent upon the equipment being in saleable condition at the time the transaction is completed.

In the present schedule, electric ranges are grouped into five classifications: two years old or less, between two and three years, between three and five years, between five and 10 years, and over 10 years. Each of these classifications is further sub-divided by the style of range, such as three or four-burner side oven or table top type, full-porcelain, or three or four-unit top and 14, 16, or 18-inch oven, in the case of older models.

Allowances on electric ranges two years old and less range from \$35 to \$50; on models two to three years old, from \$20 to \$35; three to five years, \$12.50 to \$20; five to 10 years, \$5 to \$12.50; and 10 years or over, \$2.50.

Schedule on mechanical refrigerators is as follows:

**Class A**  
(Includes Crosley, Electrolux, Frigidaire, General Electric, Hotpoint, Kelvinator, Leonard, Norge, Stewart-Warner, and Westinghouse.)

	1935	1934	1933	1932
4 cu. ft. ....	\$32	\$24	\$16	\$13
5 cu. ft. ....	40	30	20	16
6 cu. ft. ....	48	36	24	19
7 cu. ft. ....	52	39	26	21
8 cu. ft. ....	56	42	28	23
9 cu. ft. ....	64	48	32	26

**Class B**  
(Includes all makes not included in Class A.)

	1937	1936	1935
4 cu. ft. ....	\$20	\$16	\$13
5 cu. ft. ....	25	20	16
6 cu. ft. ....	30	24	19
7 cu. ft. ....	32	25	21
8 cu. ft. ....	35	27	23
9 cu. ft. ....	40	32	26
Ice Boxes—Maximum .....			\$2.50

Workings of the schedule have been very satisfactory to dealers, Mr. Byron reports.

"Dealers find themselves out of the business of buying old ranges and refrigerators, and back in the business of selling new merchandise," he declares. "With the excessive trade-in allowances which prevailed before adoption of the schedule, they were actually in the business of buying second-hand equipment. Fear of losing a sale encouraged many of these excessive allowances."

"Taking stock at the end of 1935, dealers found themselves loaded up with a lot of sentimentally and foolishly valued merchandise. They had an investment of old ranges that could not be re-sold on the basis of 50% of their cost. In contrast, every piece of trade-in merchandise carried over as a 1939 inventory, and accrued through intelligent appraising, was saleable at a good margin of profit."

As a follow-up on the trade-in system, the bureau conducts systematic shopping tours on its members, and outside of a few "honest errors" on the part of some dealers and salesmen the plan has been found to be practical and is honestly

adhered to by everyone, Mr. Byron reports. No penalties are inflicted for violations, but both dealer and salesman involved in the questionable transaction are contacted by the bureau.

In most cases, Mr. Byron asserts, this serves to clear up the difficulty, the dealer informing the salesman that his company is in the bureau to make a profit, and that persistent violations on the part of the salesman will result in his dismissal.

Appliance manufacturers and distributors are becoming interested in the bureau's operations, Mr. Byron reports.

"Manufacturers and distributors realize that a dealer cannot be stable and capable of satisfying his bills unless he is making a profit on his sales," he declares. "For that reason, they are being a little more cautious about where they place their merchandise."

Although the bureau is limited to Portland dealers, because of the difficulties involved in overseeing the operations of up-state dealerships, groups affiliated with it have been organized in Salem, Oregon City, McMinnville, Newberg, Eugene, Corvallis, and Albany.

## Atlanta's Hotelmen Explain 'Conspiracy' Against Air Cooling

(Continued from Page 1, Column 3)  
guest rooms, and this is located in one of the coolest sections, out on Peachtree road. The Journal also comments that "guests don't break their necks rushing to these comfortable rooms, because there is a nominal extra charge."

Following the appearance of Mr. Friede's letter, Atlanta hotel men came forward with plenty of argument in defense of their position. Here are their comments:

Willis G. Poole: "Atlanta is fortunate in having the highest altitude of any big city east of the Rockies, and the most favorable year-around climate. With the exception of a very few days each summer, an air conditioning system for sleeping rooms would be a complete overhead loss. In cities like Jacksonville, New Orleans, and Washington, you need air conditioning to sleep. But not so in Atlanta."

A check with the weather man shows that average mean temperatures for the cities he cited are: Atlanta, 61.2°; Jacksonville, 69.3°; New Orleans, 69.3°; and Washington, 55°.

The average August temperature is Atlanta, 77, Jacksonville, 82, New Orleans, 82, and Washington, 78. These figures do not, however, show effective temperature as influenced by the relative humidity.

Hotelman J. G. Brandon thinks his hostelry needs air conditioning less than any other in Atlanta—if any of them need it—because of high ceilings, bay windows, and large

corridors.

Mr. Brandon verifies the lament of other innkeepers that the public just won't pay extra for the extra comforts of air conditioning. He reports that the "gentlemen's agreement" was made several years ago for the purpose of waiting until the air conditioning industry became stabilized.

Henry B. Richardson said the mutual assistance pact against air conditioning was entered into because if one hotel put in a system the others would have to follow suit.

Morton Bright said one floor of his establishment, the only one in town boasting air conditioning, was equipped before the hotel became a member of the association. He added that there had been no great demand for artificially cooled rooms at a nominal extra charge, and expressed his belief that hotels here do not need to use air conditioning, which is too expensive to justify installation.

D. O. Beusse was emphatic in his belief that hotels do not need air conditioned sleeping rooms, but stated that the hotels would probably be forced to partially condition—possibly one floor each.

Steve Styron, secretary of the Atlanta Hotelmen's Association, said, "We probably will discuss this air conditioning proposition at our next meeting. There is now a definite move under way in favor of partial air conditioning of guest rooms, but the general public definitely does not demand conditioning of all bedrooms. In fact, the general public has not accepted air conditioning at all."

"The agreement between our hotels was mainly to prevent one hotel from being 'whipsawed' against another by high pressure salesmen."

## N. Y. Edison Will Spend \$150,000 on Washers

(Continued from Page 1, Column 4)  
makers of radios, three of sewing machines, and five of hand irons.

The campaign will feature three years to pay, monthly payments as low as \$2, free home demonstrations, and free installation and connection to appropriate outlets.

Consolidated Edison will spend about \$150,000 on this promotion in various forms of advertising. Participating manufacturers have contributed about \$20,000 for advertising in a total of 94 newspapers.

Profits on all sales of featured merchandise by Edison employees will be placed in a dealer pool after deduction of 3% of the selling price for salesman's commission and 3% for financial reserve. Dealers will

share in this pool in direct proportion to the dollar value of their sales of campaign merchandise.



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dependable  valves control refrigeration.

# These Things You've Learned to Trust..

● Here you are ready to board a train, positive in your mind that it will take you where you want to go. You Depend on it. And that's a wonderful thing, isn't it?

Just so with Expansion Valves. The ones you Depend on are the ones you want. For they keep on doing their job for you day after day after day.

And AP is that kind of a valve. It's Dependable. It's the kind you are probably using—but if not, then join the legion of satisfied users the country over, and be secure in your trust that THAT part of your service installation is performing Dependably.

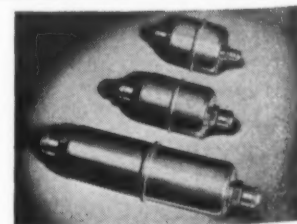
AP offers DEPENDABILITY in a full line of Thermostatic Expansion Valves, Solenoid Valves, Suction Pressure Valves, Temperature Control Sets, and the new "TRAP-IT" System-Protectors.

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Functions in the exact manner of its pilot—boosting the capacity of that pilot! Shown at left with Square D solenoid valve and thermostatic expansion valve in pilot circuit for air-conditioning.